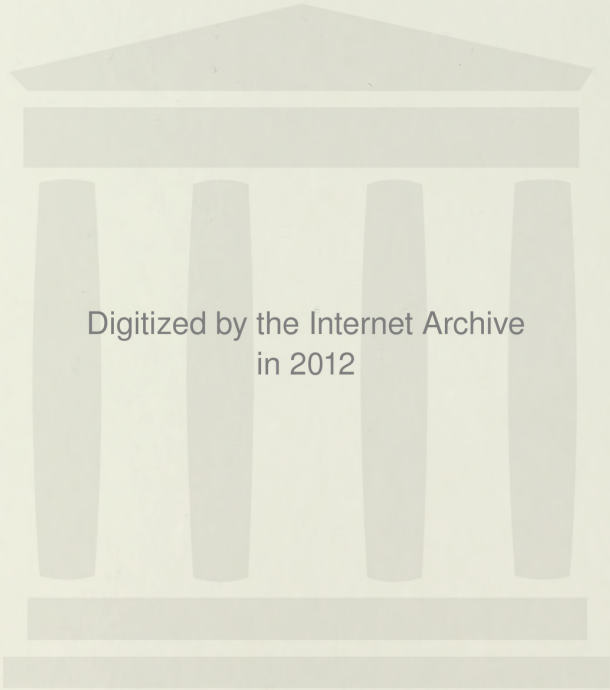
Designing for magazines

Common problems,
realistic solutions

By Jan V. White

Second edition


Digitized by the Internet Archive
in 2012

http://archive.org/details/designingformaga00whit

Designing for magazines

Designing for magazines

Common problems, realistic solutions

for: front covers,
contents pages,
flash forms (late-closing news),
departments, front and back,
editorial pages,
feature section openers,
new product and
new literature reports

Jan V. White

Second edition
R. R. Bowker Company
New York and London, 1982

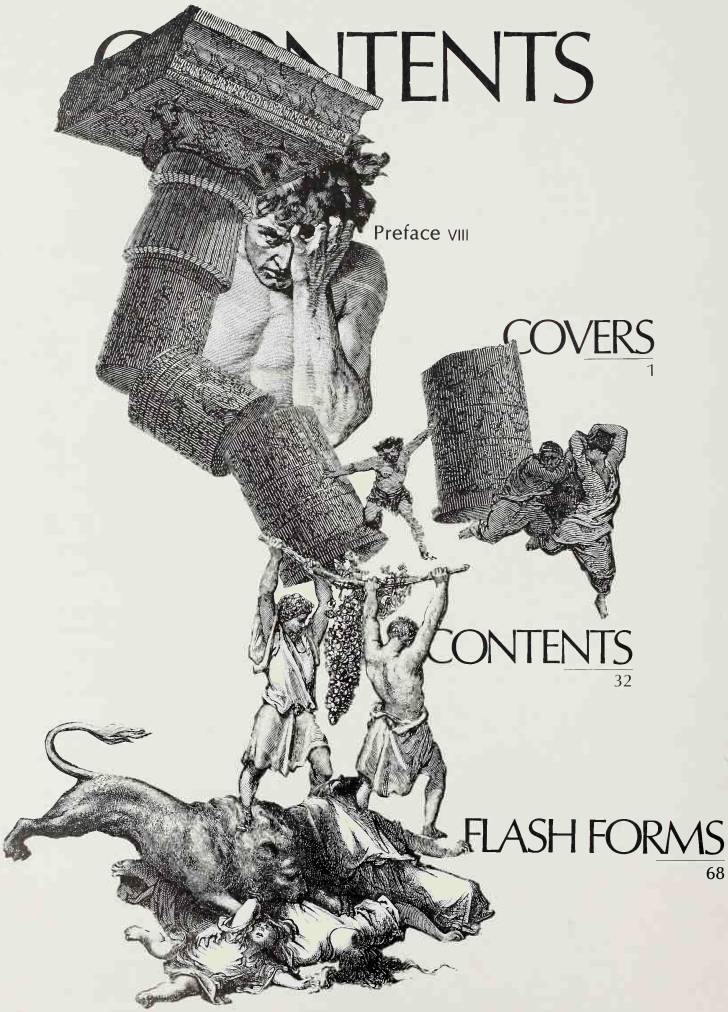
Published by R. R. Bowker Company,
a division of Reed Publishing (U.S.A.) Inc.
Copyright © 1982 by Jan V. White
All rights reserved
Printed and bound in the United States of America

Except as permitted under the Copyright Act of 1976,
no part of this publication may be reproduced or transmitted
in any form or by any means, or stored in any information
storage and retrieval system, without prior written permission
of R. R. Bowker Company, 245 West 17 Street, New York, NY 10011.
Library of Congress Cataloging in Publication Data
White, Jan V., 1928-
Designing for magazines.

Rev. ed. of: Designing covers, contents,
flash forms, departments, editorials, openers,
products for magazines. 1976.
Sequel to: Editing by design.
Includes index.
1. Magazine design. I. Title.
Z253.5.W46 1982 741.65'2 82-4226
ISBN 0-8352-1507-5 AACR2

For Karla Weiss and

CONTENTS



Preface VIII

COVERS
1

CONTENTS
32

FLASH FORMS
68

DEPARTMENTS
88

EDITORIALS
124

OPENERS
146

PRODUCTS
176

Index 208

The hidden meaning of this frontispiece will become clear if you read page XII.

PREFACE

This is a companion volume to *Editing by Design*. It was assembled in answer to my students' request for examples of specific applications of the philosophy of *Editing by Design*. That philosophy (if one can honor plain old common sense with such a bombastic title) is simple:

As writers and editors we are always talking about "saying" things to our audience. That's a dangerous misnomer lying at the root of many of our problems. We — in publishing — never actually SAY anything. We SHOW. *Saying* is an aural means of communication whose essence is the direct relationship between speaker and hearer. It may be artificially multiplied by broadcasting technology, but that only mechanizes the one-to-one relationship. In publishing, when we speak of "saying" things, we actually mean printing our words on paper and then persuading the audience to read and absorb our thoughts through their eyes. That is a very different process from that of speaking since it requires the services of an interpreter: the designer. Being human, few writers trust that visual specialist to do right by their words; by the same token, few designers ever get as involved in the content of the material as they should. Instead, designers tend to concentrate on the superficial gloss of making it all look appealing.

If we are to communicate quickly and clearly (as we must, if we are to retain our audience), then we must accept the fact that WHAT we say is integral with HOW we say it. Visual form and verbal content are inseparable. That is why it is essential that verbal people become more sympathetic toward the visual aspect of their work (even if they don't all choose to become art directors) and why visual people must become more interested in the editorial purpose of the stories so they can express them cunningly and dramatically. They should, with justice, learn to consider themselves editors-who-use-design-as-a-tool, rather than pure designers grafting attractiveness onto strange materials. Graphic design is not something added to make pages look lively. It is not an end in itself. It is the means to an end — that of clear, vivid, stirring communication of editorial content.

This is so obvious that it hurts. What hurts more, though, is the sad fact that two separate editorial specialties have developed in our profession that create artificial barriers, and serve no useful purpose other than that rather shameful one of people needing someone to look down on and complain about. Sadly, few are the

cases where respect and regard for each others' skills has melded a group of writers, editors, and designers into a team. Clearly, varying talents and different technical skills are needed for the common product. But those specializations must be overcome by the one overriding need: that of communicating effectively.

That implies, first and foremost, that the originators of the ideas (the writers) make up their minds about what it is they are trying to say, and what its significance to the reader is likely to be (i.e., the reason for publishing in the first place). Having articulated this to the designers, they can then rely on them to express those ideas in the most arresting manner, in order to hurtle them off the pages into the reader's mind.

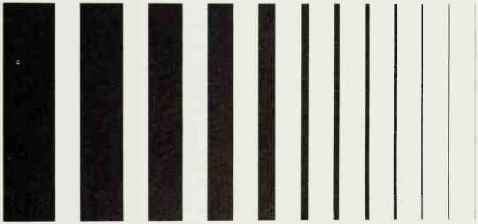
Editing by Design is all about how the techniques of graphic design can be used to do just that.

Designing for Magazines is a compendium of case histories showing the ideas of editing by design in practice. Many are shown in before-and-after format. All of them describe the specific problems and reasons why the solutions took the form they did — THAT is the purpose of this book. The graphic appearance of the examples is a secondary result; very few have been picked for their flamboyant graphics. That is deliberately done — to show such flamboyance in this analytical context might be misleading, for it might be promising something that can only be accomplished under very special circumstances. There are annual collections of prize-winning graphics available showing such marvelous pages; they are celebrated, envied, and possibly even emulated. But one ought to learn to walk before attempting to run.

This, the second edition of *Designing for Magazines*, retains the original organization by page type found in most publications. No matter what publication you may be working on, be it consumer or business, in-house or national, small or large, rich or tightly budgeted, your Contents page, for instance, has problems that are common to all Contents pages and grow out of the material and purpose of the page. Those problems are analyzed in depth and then each chapter shows a series of annotated examples of various solutions. Many fresh examples have been added, and many outdated ones replaced. To broaden the utility of this book as a reference volume, I have inserted 116 examples culled from 103 publications of all kinds by 94 designers. Here you can, indeed, find the flamboyant, exciting design.

These are then followed by sketches of additional patterns or solutions. The only chapter that has not been given this broadened treatment is the first, on covers. Here the variety is so vast and the special format problems so specific to any one issue, that I found myself totally at a loss as to how to make sense of this vast array. So I took the coward's way out and did nothing. Instead, I suggest you visit your local newsstand or supermarket magazine rack; you will see how daunting such a choice process might be!

As an example of the realistic, down-to-earth approach followed here, let me explain the use of the many ruled lines shown in the analyzed example pages (as well as in the many other examples for whose design I was not responsible). I happen to *like* rules — but such a subjective reason ought to have the very lowest priority. I also believe rules to be useful:



1. They are decorative — or can be made to be so.
2. They are cheap and always available from any printer on any typesetting machinery.
3. They are marvelously useful for organizing space by defining units within that overall space: they articulate the edges of things, they enclose elements, they contain.
4. They can be used as fences to separate neighbors .
5. They can be used as glue to attach elements to each other when space is tightened.
6. They can add "color" to the page by creating contrast between themselves and the type or between light, thin hairlines, and bold, heavy black bars.

7. They can be attached to type as underscores or overscores and help important words gain the desired emphasis.

8. They can become a subliminal patterning for a series of pages.

It is possible to see them utilized in all these ways in the examples shown. Seen cumulatively in this book, they are a bit overwhelming, I admit. But in the pages of a magazine there are fewer of them, more regularly used. And if they are used wisely and well, they can be made to belong to the editorial matter so logically that the reader does not even notice them — yet the product would be the poorer for the lack of them.

Now as to the frontispiece on page VIII: in my 31 years in publishing, I have worked with literally hundreds of editors and designers. Many of them were good to work with, others awful; some were fun, others dreadful. Some happened to be men, others women — and they fell into the good or bad categories regardless of gender: what matters is character and capacity and insight and responsibility and confidence and maturity and good judgment and seriousness of purpose and all the other attributes that good editors and designers must have. Gender (in this context) is totally immaterial.

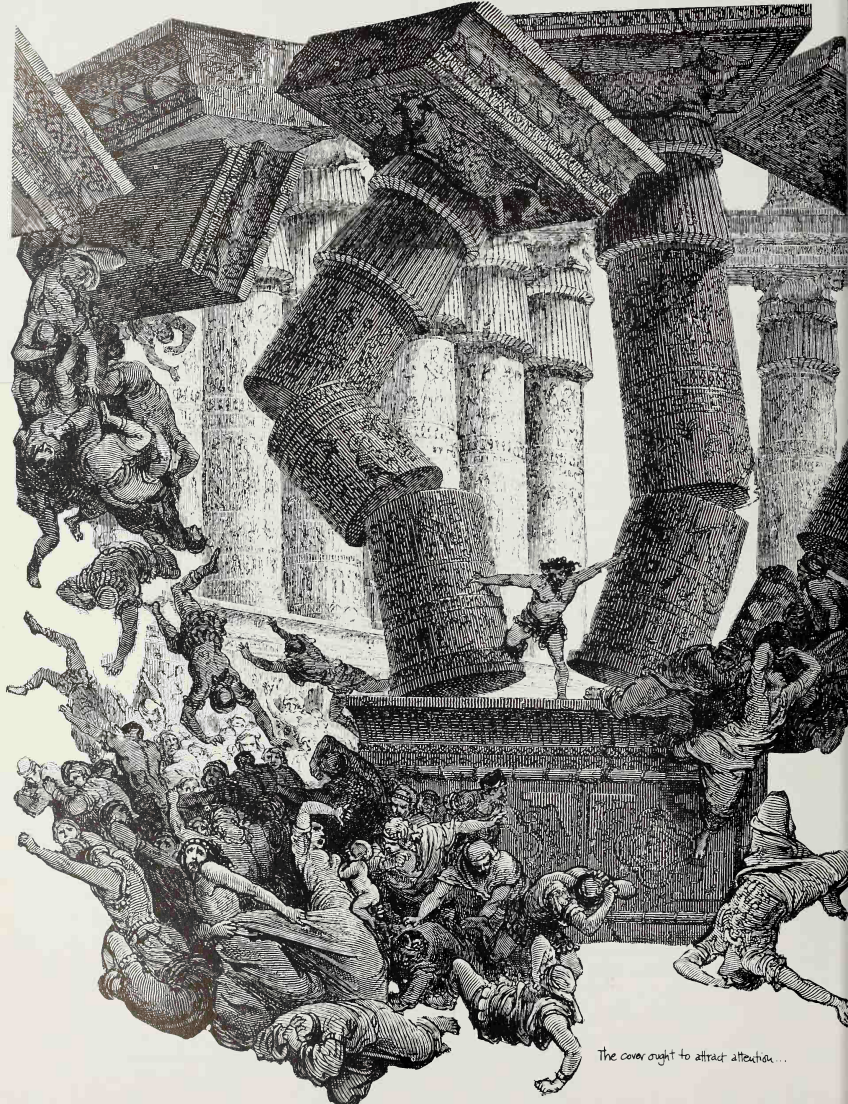
As far as the other frontispieces in the book are concerned: let's face it, unless you are fascinated by contents pages or new products pages, this could be a very *dull* book! Something had to be done to spark it up with a bit of whimsy. So I went digging in the public domain and unearthed some old engravings that might yield that touch, given some judicious doctoring and inappropriate captions. All but three are from Gustave Doré's illustrations to the Bible dating back to 1869 (the illustrations, that is; the text goes back a bit farther).

It only remains to acknowledge with gratitude the help and cooperation of my many friends in publishing. It is obviously impossible to list them individually. It must suffice to list the publications kind enough to permit me to use their pages for the examples. They all have Publishers, Editors, and Art Directors — all clients and friends. To them all I am deeply grateful.

Westport, Connecticut, April 1982

ACKNOWLEDGMENTS

Architectural Record, McGraw-Hill, New York
Chemical Engineering, McGraw-Hill, New York
Construction Methods & Equipment, McGraw-Hill, New York
Data Communications, McGraw-Hill, New York
Dental Economics, PennWell, Tulsa, Oklahoma
Electrical Construction & Maintenance, McGraw-Hill, New York
Engenheiro Moderno, Serpel, Sao Paulo, Brazil
Engineering News-Record, McGraw-Hill, New York
Expansao, Editora Abril, Sao Paulo, Brazil
Golf Digest, New York Times Magazine, Norwalk, Connecticut
HoofBeats, U.S. Trotting Association, Columbus, Ohio
House & Home, McGraw-Hill, New York
Housing, McGraw-Hill, New York
Industrial Engineering, American Institute of Industrial Engineers, Atlanta, Georgia
Industrial Equipment News, Thomas Publishing, New York
Industrial Literature Review, Thomas Publishing, New York
Industrial Marketing, Crain Publications, Chicago
Industrial World, Johnston International Publications, New York
Kansas Farmer, Harvest Publications, Cleveland, Ohio
Library Journal, R. R. Bowker Company, New York
Medico Moderno, Edicom, Mexico City
Michigan Farmer, Harvest Publications, Cleveland, Ohio
Midwest Purchasing, Purchasing Management Association, Cleveland, Ohio
Modern Plastics, McGraw-Hill, New York
Nation's Schools, McGraw-Hill, New York
O Medico Moderno, Serpel, Sao Paulo, Brazil
Oil & Gas Journal, PennWell, Tulsa, Oklahoma
Scientific Research, McGraw-Hill, New York
Spotlight, Abraham & Straus, New York



The cover ought to attract attention...

COVERS

Everyone on a publication cares about — and worries about — the cover. That's because it is so many things to so many people: an attention-grabber on the newsstand; an attention-seeker on a desk or on the coffee table; a curiosity-arouser tempting one to look inside; in short, a showcase for the product. The editors are keenly concerned with the cover's drawing power since they want their product to be read and appreciated; the publishers are concerned, because they want their product to be successful — to be popular, useful, sell well, and thus be an increasingly valuable vehicle for advertising; the advertising sales people are concerned, because they need not just a good product, but a product with identity, a noticeable identity on which they can base their sales strategy; and circulation people are concerned, because they want to maintain the current circulation as well as increase it in quantity and improve it in "quality," through the perceivable excellence of their product. Excellence breeds confidence and a desire to invest in a subscription or a single issue at a newsstand. Equally, excellence breeds confidence in the advertiser, who wants his announcements within the magazine's pages to share in its aura.

The cover is what the public sees first: it is what registers uppermost in the viewer's mind. Obviously the inside contents are equally important, but they take time to examine, require intellectual effort to remember, visualize, and judge. The cover is much more accessible. It is undeniably there, staring up at you and you cannot help reacting to it in some way. No wonder so much attention is paid to it. It is the public package of the contents. It has to be manipulated in such a way that the reader, the buyer, the advertiser can all judge the book by its cover. It must express character as well as content; it must be believable, individual, have its own identity and its own image. The cover image becomes a major element in the overall image of the publication. It must impress a sense of urgency and importance; it must communicate a sense of worth, not just of the material packaged within, but also of *itself* as a product. As such, it is a symbol of the relationship between the

editors and the readers, so that the readers actually look forward to receiving the next issue as a welcome, familiar, respected friend.

This sounds like a pretty tall order for a single page, and so it is. Furthermore, there are not many covers that succeed in this complex mission. They may succeed in most of their tasks most of the time, but seldom in all jobs simultaneously. Which doesn't mean one ought to give up and stop trying!

Fortunately there are guidelines based on experience, proven market-effectiveness, successful experimentation and just plain editorial instinct. Some of them are described below. But there is one generally accepted dictum that unlerlies them all: *appeal to the reader's self-interest.*

If the cover is "dull" — if it fails to sell the fascination of the subject and, more importantly, the significance of that fascination to the reader — if it doesn't persuade him of his need to have the knowledge for fun and profit, then the chances are the cover has failed: the prospective buyer won't buy, the prospective reader won't open the magazine. The magnet will not have been strong enough to win him over.

But don't think that the fault neccessarily lies in the cover picture. The cover illustration, both in its subject and its graphic treatment, isn't nearly as important as the editorial battle over its choice would seem to indicate. *Of course* the pictorial image has an effect: it can be attractive or repellent; felicitous or unbecoming; to the point or irrelevant. But whatever it may be, it only acts as a fleeting eye-catcher. It is the first step in rousing the potential buyer/reader's attention. What ultimately hooks him and persuades him to part with money and/or time are the words.

With the exception of the highly specialized publications that deal with purely visual subject matter (such as photography, architecture — or women) it is safe to say that the cover lines (the billings) are far more important than the illustration. It is the words that flash that signal of significance to the reader's self-interest. They interpret the intended meaning of the picture (for a picture

without words is open to grave misinterpretation). They announce the content, but, through the choice of words, they also imply the slant of that content, so that the reader will understand the story's probable importance *to him*.

Often several stories in the issue are signaled that way. If the stories are chosen with care and described in intriguing language where he cannot miss the descriptions, how can the reader fail to respond?*

Covers are made up of four elements:

1. The basic format (the normal arrangement of the page, issue to issue)
2. The logo and ancillary information such as date, etc. (usually varying in color only)
3. The illustration (varying in subject and graphic treatment, issue to issue)
4. The cover lines (varying in words, of course, but also in position, if the format allows)

These four elements make a mix of potentially tremendous variety. The precise mix for any one publication depends on the goals and character of that publication. However, there are some basic criteria involved in deciding the proportions of the particular mix. And here are some of the most often asked questions and answers about these criteria.

Should the format be standardized?

Yes. A standardized format has a definite recognition value and gives the publication familiarity from issue to issue. Besides, the production process is simplified (no small advantage). Also, paradoxically, the more the format is standardized, the greater the freedom of graphic treatment of variables within that framework.

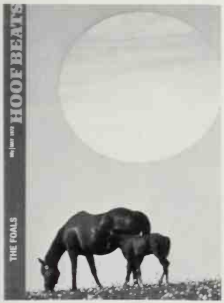
*Well, let's face it: it is amazingly depressing how often he can . . . but why worry, there's always the next issue!

But such a sweeping generalization immediately needs qualifying by another which is equally sweeping: no matter how good a format may be, it is also essential that it be flexible enough to allow the form of expression required by any exigency that might come up. In short, systems are great, as long as they do not become straitjackets. Common sense and individual judgment, *plus departure from the system,* must be allowed in the equation as well. Reducing creativity to a series of computerized formats may, indeed, be cheaper, but the resultant printout cannot be anything but rigidly restricted to the formulas fed into the computer. The trouble with a good system is precisely its own excellence: it can become a substitute for thinking. When that happens in publishing, we might as well be dead.

Should the picture be big or small?

This depends on the availability of good pictorial images (photographs, illustrations, portraits, graphs — whatever the visual image may be). If they are available in a dependable quantity and quality (especially quality), then it is a reasonably good bet that a cover format can *and should* be built around a large image — perhaps full bleed — which can be relied upon to have the requisite poster impact. However, to have that impact, the picture should be unusual in either subject, treatment, coloration, handling — or a combination of them all — since full-bleed pictures are so commonplace that just plain size carries no weight.

Symbolic treatment of the subject is often preferable because of its surprise value, unless a truly realistic situation can be shown in a dramatic way. But the symbolism must be simple to be effective, or the startling effect is lost. Still-life photographs of unexpected combinations of items are highly effective, since they are surprising as combinations, and they are often quite simple to have made. Ingenuity and creativity of thinking are more important than money available for unusual or expensive reproduction technology.



But — again — the ingenuity must be channeled to get the reader interested; thus, whatever brilliantly surrealistic imagery or flamboyantly artistic fireworks may appear on that front cover, if it doesn't achieve this one prime purpose it is no good (however many medals it might collect in design competitions).

One sure bet is people pictures. Everyone is curious about people: who the successful ones are (and what made them that way); what the leaders are thinking; what can be learned about them or from them that might come in handy.

What if the very subject of the publication does not lend itself to visual interpretation, or there is a dearth of illustrative material, no matter how clever the editors, designers, and cartoonists hired? Then, obviously, the format cannot be built around graphic images. Instead, it must be accepted that the pictorial element (if any) will be subdued in size and importance and the poster value of the cover obtained by other means. Large logo, perhaps? Large color area (with color changing from issue to issue)? Large type for the cover lines? In sum, it has to be a large something-else-other-than-picture, anyway. And it has to have a variation capability of color change or arrangement change so that variety between issues is assured, visibility secured, and recognition quality retained. Besides, it makes life so much easier not to have to strain to produce silk purses out of thin air (let alone sows' ears) issue after issue after issue after issue.

Starting on pages 28 and 18 are examples of the two extremes. The cover format of *HoofBeats* is predicated upon first-rate photography which speaks for itself. The strategic purpose of the cover is simply to present the glamour of the sport of harness racing. Full bleed is obviously useful, except where it is thought that variation therefrom might be more effective; absolute freedom of format is needed — and given. Contrast this to the cover of *Industrial Engineering*, for which illustrative material is scarce; the impact of the cover is based upon the overall impression of the design, rather than the picture, which is put in a position of less importance on the

CHANGE!
WORKING
"I'M A BETTER MOTHER BECAUSE I WORK"
Savvy
Better Homes Brides
New Woman
Yachting
Rudder
Fishing Small Boats In BIG WATER
BOAT
MADEMOISELLE
GLAMOUR
COSMOPOLITAN
Photographic
MODERN PHOTOGRAPHY
High Fidelity
METROPOLITAN HOME
TOWN & COUNTRY
Esquire
REDBOOK
SOPHIA LOREN'S STARTLING NEW LIFE
"I'm going to get what I need as a woman"
"I'LL NEVER LIE" and other lies that lovers tell
HOUSE BEAUTIFUL
DECORATING
HARPER'S BAZAAR
YOU LOOKING GREAT

page. The logo is large, the color area in which it floats is ample, and the cover lines glinting on this color announce the contents of the major stories clearly.

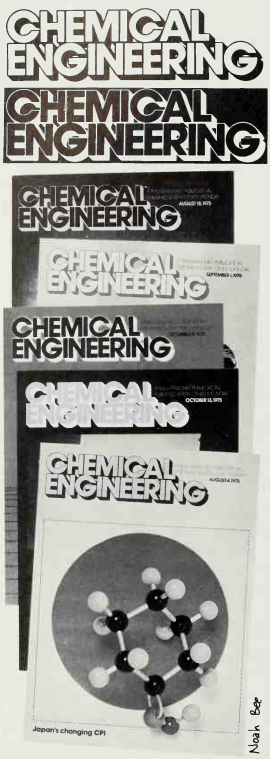
How should the logo be designed?

The logotype is the trademark of the publication. It is the symbol that ought to come to mind immediately when the magazine is mentioned. It is used not only on the front cover, but in all written materials for the publication: stationery, promotional material, circulation promotion letters. Wherever the publication's name is *seen* it ought to be *perceived* in terms of its logo. The name of the publication ought to be a personalized visual image — like a monogram; it ought, also, to be of the same family of type as the department headings inside the magazine, and ought to bear, if possible, a resemblance to the headline typeface used. This unity of visual character is a major link that ties the editorial matter together as a unified product.

Where should the logo go?

Newsstands dictate placing the logo at the top, of course. If copies are to be sold on newsstands, then the choice has been made for you. But, if the publication goes out by mail, the logo can fall wherever the designer may desire.

If the picture on the front cover is mediocre and the design depends heavily on the logo for graphic interest, then the logo ought to be the first element to be seen — and thus ought to go at the top of the page. (See *Industrial Engineering* examples, page 18.) For variety within this standard placement of the logo it is useful to have a design that will accommodate several treatments. Thus, *Chemical Engineering*, for instance, can be handled with light or dark "shadows," in color or black-and-white, or black-and-color, or



Noah Bee

Some of the many ways in which a logo using "shadowed" lettering can be manipulated to make the most of color possibilities — yet retain its original recognition quality (AND simplicity in production!)

white-and-color — depending on the best relationship of the logo to the picture.

If the picture quality is somewhat better and good illustrative matter may sometimes be available (and ought to be trumpeted on those occasions), then the format should be flexible enough to allow variation in placement. *Library Journal* allows such variations in placement, gaining diversity and flexibility therefrom (page 26).

If the picture is of poster quality, then the logo can be degraded to a minor element, used only as recognition label, and can (should) be placed wherever the picture dictates. (See the *HoofBeats* examples, on page 28.)

Should the cover have a frame?

It is safer not to use delicate frames around the edges of the cover since the trimming of the publication is often inaccurate; there are few things shoddier than poorly trimmed, crooked front covers. A design based on handsomely squared-off geometrical precision makes the crookedness more noticeable.

A full bleed makes the picture appear bigger because the bleeding implies that the image continues beyond the confines of the page and that what you see is just the central nucleus of a larger scene. This visual trick may well perform a useful service, depending on the subject matter: an oil well derrick in the Sahara needs to be seen against the enormity of a background extending to limitless horizons — and a bleed suggests this limitlessness; on the other hand, a jewel lying on a velvet cushion needs to be concentrated on — the expanse of surrounding velvet is immaterial, so a framed view is more appropriate. If a frame is used, however, it must be graphically strong in size and color to overcome whatever bad trimming might lie in store for it.

<-- Version of logo rejected for reasons of practicableness in application: it would be fine for a white background, but less so for use over color illustration.

<---- Accepted version is much simpler in concept and graphics

Should there be more than one cover line?

Yes, if there is more than one major story in the issue. If there is only one cover line, then the illustration must have a direct relationship to the story being announced. If there is more than one cover line, then the cover picture can relate to any one of these lines (which should then be handled by position and size to act as both cover line and caption to the picture). The picture, however, does not need to refer to the major story. Obviously this gives greater freedom to those publications whose dearth of visual material often dictates using illustrations of minor stories on the cover simply because those illustrations are inherently interesting (or merely just the best available).

The degree of graphic attention or stress the cover lines receive varies with each publication. Some magazines which rely heavily on newsstand sales superimpose cover lines in gaudy colors over the background picture, some professional magazines run them in demure black, neatly stacked at the foot of the page, other publications vary placement and handling of cover blurbs for each issue according to the exigencies of the illustration and editorial judgment. No single technique is better than another; any is good as long as it intrigues and encourages the potential reader to open the copy.

Do white covers get dirty?

No. Well — maybe.

Anything will get dirty if the reader's thumb is covered with axle grease. But if pristine whiteness is used as background color, chances are that the reader will treat the issue with respect and wipe the grease off on his pants first. It is folly to give up the useful background color of white, which can make the cover so clean and pure and charming, for the potential philistine spoiler. But, white is not the only marvelous background color — so is good old, solid black.

Magazine

Are black covers funereal?

No. Not if the black is used as a background, simply and forthrightly.

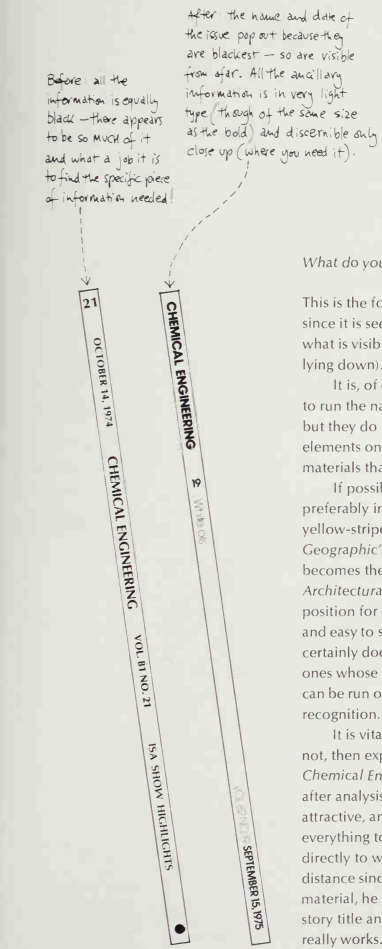
Black is, indeed, the color of mourning in some cultures (in others it happens to be white). However, to renounce the use of black for that reason is nonsense. Obviously, if other death symbols, like Old English typefaces, the word "alas," wreaths, or weeping willows are combined with the black, then the mourning sickness is reinforced! But if the black is treated as a raw material — as a pure color — then the artificially imposed funereal cliche is avoided, and a strong impression is created which is, perhaps, even more useful than that effected by white (see pages 22 and 23).

What do you do with a gatefold cover?

Assuming that the inside of the cover has been sold to an advertiser who will foot the bill for such an unusual event, then the gatefold front cover becomes an enormously stimulating problem. How do you make the most of it?

You do NOT make the most of a gatefold by treating it as two separate, individual pages, with one sort of material on one page and another sort of material on the other. That is a wasted opportunity if ever there was one. Instead you use the extra wide space to expand the image over the entire area at your disposal — making it larger in scale and double in impact value.

Naturally, the first image that is perceived is that part of the cover that is always seen (since the gatefold must be packaged folded under). However, the gatefold's inherent possibility of delivering a one-two punch when it is opened is where its potential greatness lies. The first intriguing glimmer of the idea appears on the front, always visible half of the cover; then it is expanded by the unfolded second half, so that the editorial meaning of the complete image communicates itself to the viewer with inescapable, unforgettable impact.


Before all the information is equally black — there appears to be so much of it and what a job it is to find the specific piece of information needed
After the name and date of the issue pop out because they are blackest — so are visible from afar. All the ancillary information is in very light type (though of the same size as the bold) and discernible only close up (where you need it).
21
OCTOBER 14, 1974
CHEMICAL ENGINEERING
VOL 81 NO. 21
ISA SHOW HIGHLIGHTS
CHEMICAL ENGINEERING
SEPTEMBER 15, 1975

What do you do with the spine?

This is the forgotten area of the cover, yet it has great sales value since it is seen even more often than the front cover; the spine is what is visible in a stack of publications on the shelf (standing or lying down).

It is, of course, necessary for reference purposes and filing ease to run the name, date, and volume and issue numbers on the spine, but they do not have to be enormous. It is much wiser to have other elements on the spine that do a little screaming for attention with materials that are more significant.

If possible, it is useful to have a standard spine treatment, preferably in color and on the entire spine: *Oil and Gas Journal*'s yellow-striped spine is immediately recognizable; so is *National Geographic*'s. Some magazines run a color over their logo, which becomes their symbol. Others run the logo itself in color. *Architectural Record* runs the issue number in red in the same position for each issue, which makes it easy to spot, easy to file, and easy to separate from the competition. If space allows (as it certainly does on the 9" x 12" format publications and some smaller ones whose logo is not too long) then the subject of the main story can be run on the spine, which is useful for future retrieval and recognition.

It is vital, however, to separate what is important from what is not, then express it as such in type size, color, and intensity. *Chemical Engineering*'s spines were a dark, illegible, confusing mass; after analysis, they were changed and are more legible, more attractive, and — yes — more useful. The reader need not read everything to find what he is looking for, but can, by instinct, go directly to what he needs: he can identify the publication at a distance since the logo and date pop out at him; to find the specific material, he will be closer to the stack and can focus on the lightface story title and ignore the dark smudge of logo and date. It really works.

O MÉDICO MODERNO
OUTUBRO 1967
O que o cliente pensa do médico
Pesquisa de opinião realizada em São Paulo com exclusividade para O MÉDICO MODERNO revela critérios e motivos que orientam o paciente na escolha do médico.
Vil Inquérito: Cirurgia Plástica
REVISTA PROFISSIONAL E CULTURAL DA MEDICINA
Arnaldo Sedrani

EDICO
DERNO
REVISTA PROFISSIONAL E CULTURAL DA MEDICINA
Sua clínica liberal ganha nôvo sistema de prestação de serviços profissionais
10 critérios para V. lucrar até 2000% em antiguidades
V. pode ter, grátis, informes biomédicos de todo o mundo
Fundação custeará suas pesquisas biocientíficas
Guia para V. dialogar bem com os pacientes "hippies"

The examples here trace the changes in format of a local Portuguese-language medical magazine as it evolved into a leading multi-edition Latin American monthly.

The first format, at left, was innovative in its time, devoting as it did a large, formalized, framed area to a startling picture. The thin, white frame set off the picture but suffered from poor trimming. The cover lines were restricted to the small box in the upper right.

The first change was a change in the wrong direction, at least as far as graphics is concerned. (Evidently the success of the publication was not hindered by the cover handling!). The cover lines were enlarged at the expense of the illustration which was reduced to the vertical sliver at left. The purpose was to focus attention on the contents by means of stressing the cover lines, yet retain the familiar square shape. The only good outcome of this move was to allow the logo a much larger space in which to be seen. But even that was dwarfed by the heavy cover lines which swamped all else. The result, a cover that was too busy, lacked poster quality, was ill-proportioned in its elements (so much so that the cover lines had to be set in an illegible condensed face to fit into their narrow space) and, worst of all, communicated an image which lacked the sophistication the publication demanded.

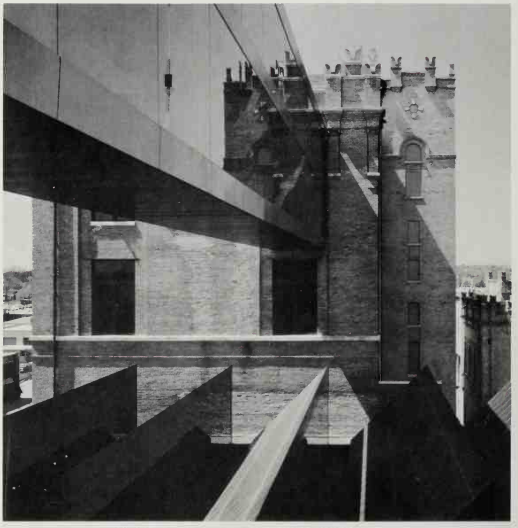
The latest development was a total redesign, based on the decision to make the most effective possible use of the graphic image inherent in the fascinating subject matter. Great attention is paid to the illustrations and their attention-getting capacity — not necessarily as startling but rather as communicative vehicles suited to their specific audience. All covers are full color, full bleed and the various national editions may use their own subjects. The highly individual logo is the element that holds them all together since it appears in prescribed position and size on the page.

The logo is the same in all editions (three are shown Brazilian, Argentine, Mexican) its color varies according to the requirements of the picture. Its style is repeated in all the department headings

Standard format with a square picture area allows variations that have a strong

Since this is a non-newsstand publication, the logo can be placed at the foot of the page with impunity; and, since this is a publication dealing with highly photogenic material, the graphic image on the cover can be relied upon to create the requisite poster impact. The square is used for two reasons: first, it is a satisfying geometric shape which works well in proportion to the white area left over at the foot of the page; and, second, it is the ideal compromise shape for accommodating photographs since about half the candidates for the cover are vertical and half are horizontal.

The top line, slightly separated from the others for emphasis, does double duty as caption as well as cover line. The large numeral is always run in bright red — as is its duplicate on the spine.



SAN ANTONIO SHOPPERS OF ART BY CAMBRIDGE SEVEN ASSOCIATES, INC
JOHN PETERSON FOR TEXAS WILD FORMS IN ATOMIC FUNCTIONALISM
PHOENIX BATH HOUSE CENTERPIECE FOR URBAN REVITALIZATION
ROUND TABLE: STEEL STRUCTURES IN ARCHITECTURE
BUILDING TYPES STUDY: FIVE NEW ENGLAND SCHOOL BUILDINGS
FULL CONTENTS ON PAGES 10 AND 11 SEMI-ANNUAL INDEX ON PAGES 248-253

ARCHITECTURAL RECORD

JUNE 1961 **6** A McGRAW-HILL PUBLICATION SIX DOLLARS PER COPY

Red numeral, all other type in plain black

Alex Stillmo

A years-worth of covers

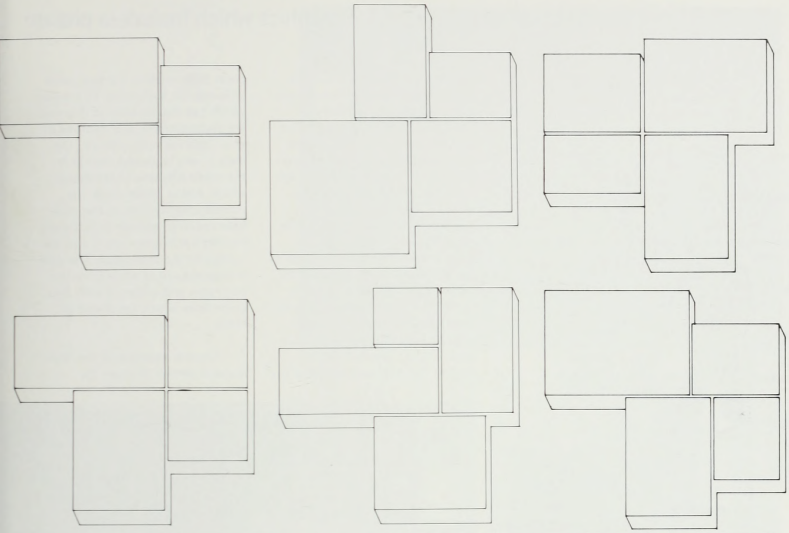
Typical format and two variations

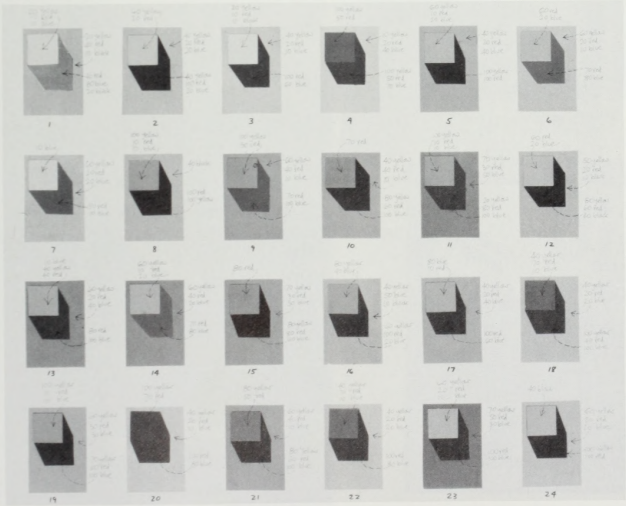
Anna Maria Eggert

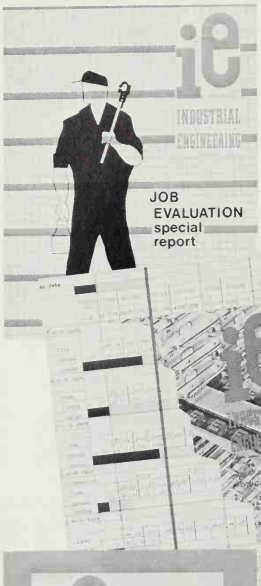
Alberto Burchard

This tabloid size publication of new product reports had two problems: how to give the front cover a more vivid recognition quality, and how to make its production process less cumbersome. The solution served both purposes simultaneously: the pictures were clustered and their descriptions placed in the surrounding space (which also made the background color field appear larger); the logo area was simplified; the desired effect of colorfulness was enriched by the addition of the "shadows" cast by the logo words as well as the pictures, for the insides of the letters can be in one color, the shadows in a second, and the background in a third. A number of cluster panel mechanicals was made up with various proportions to fit likely photo sizes (six are shown opposite) and a chart showing two years' worth of color schemes was also prepared. The chart (opposite) shows both swatches of the color and process color tint percentages. Assembly became child's play: picking a cluster appropriate for the chosen photos and a color scheme that would work with them — and the rest is up to the printer.

↑ The unavoidable address sticker



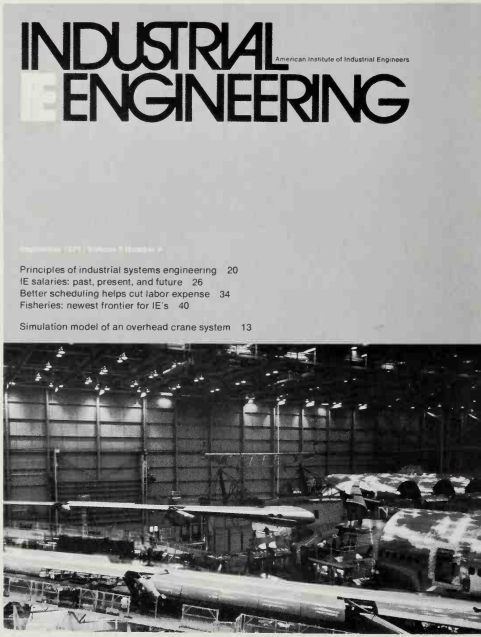




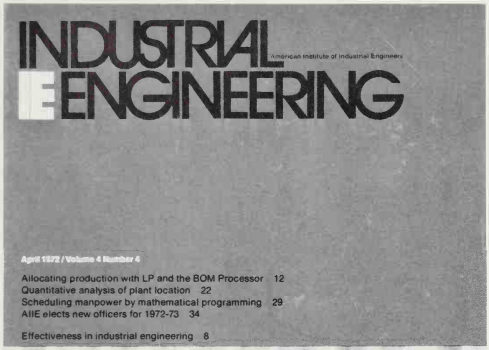
Here is a perfect example of the many publications whose subject matter is only tangentially photogenic and whose dearth of pictorial material results in constant struggles to conceive covers with impact. The examples at left show the results of such misdirected "freedom to create." Replacing this nebulousness with controllable techniques is one major way to improve the image of the magazine while allowing its editors to sleep better at night.

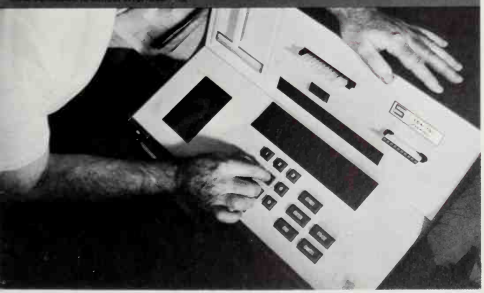
In this case, the picture area was reduced to a shallow strip across the foot of the page, thus automatically diminishing its evident importance. The rest of the cover is devoted to a strong color, different for each issue, of course, which can also be used to dress up the picture below as a duotone or as a tintblock with artwork. The logo is very large and obviously the major element of the design, which makes sense since the readers identify with it. The cover lines are large enough to be clearly legible; the bottom one is also the caption to the illustration. The date is dropped out in white from the color area and contrasts with the cover lines which are always in black.

Another example of this technique is shown on page 26.


INDUSTRIAL
American Institute of Industrial Engineers
ENGINEERING
Principles of industrial systems engineering 20
IE salaries: past, present, and future 26
Better scheduling helps cut labor expense 34
Fisheries: newest frontier for IE's 40
Simulation model of an overhead crane system 13

as one element*

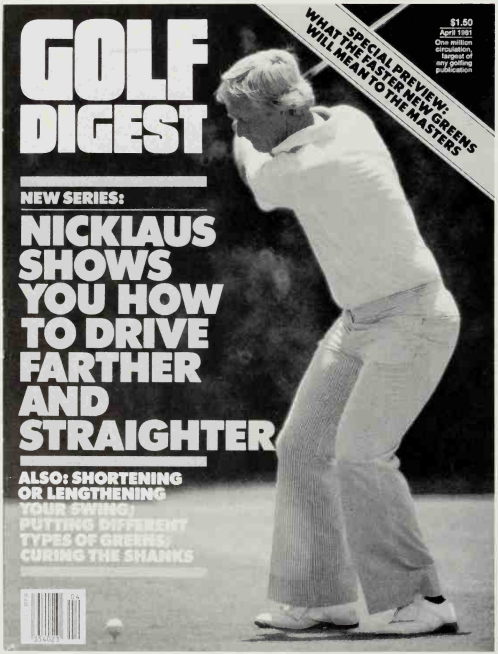

INDUSTRIAL
ENGINEERING
American Institute of Industrial Engineers
April 1972 / Volume 4 Number 4
Allocating production with LP and the BOM Processor 12
Quantitative analysis of plant location 22
Scheduling manpower by mathematical programming 29
AIIE elects new officers for 1972-73 34
Effectiveness in industrial engineering 8



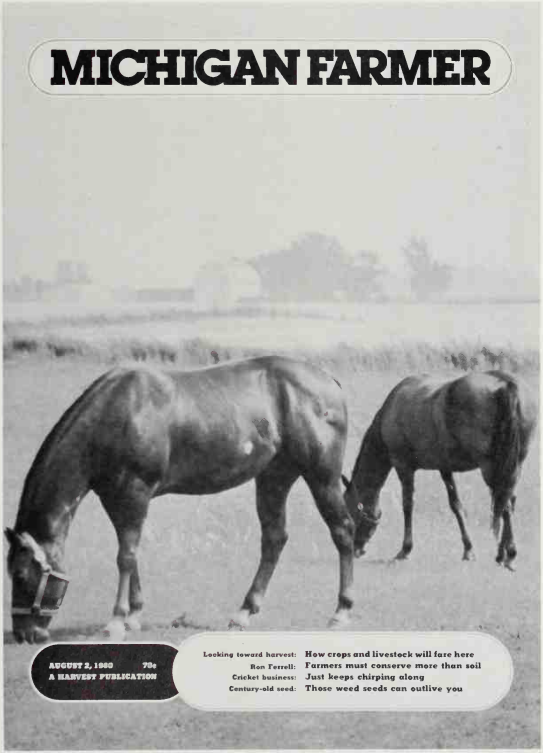
* but not the main one

Using large size, medium size, and small size type in cover lines

How we see and handle the physical product affects the design of cover lines. For newsstand display, the logo obviously needs to be the largest element, in order to give immediate identification to the product. Next size down, yet still legible from several paces away, should be the type touting the major story. The largest type having done its work of attracting our attention, and perhaps beguiled us into picking up the magazine in our hands, the balance of the type can then be smaller, for it is to be read merely at arm's length. (When we start reading inside, we hold it 12 inches from our eyes, so the type can be smaller still.) This cover of *Golf Digest* designed by John Newcomb shows the triple typographic scale very clearly and elegantly.

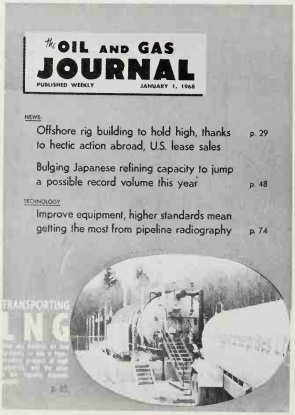

GOLF DIGEST
SPECIAL PREVIEW: WHAT THE FASTER NEW GREENS WILL MEAN TO THE MASTERS
$1.50
April 1981
One million circulation, largest of any golfing publication
NEW SERIES:
NICKLAUS SHOWS YOU HOW TO DRIVE FARTHER AND STRAIGHTER
ALSO: SHORTENING OR LENGTHENING YOUR SWING; PUTTING DIFFERENT TYPES OF GREENS; CURING THE SHANKS

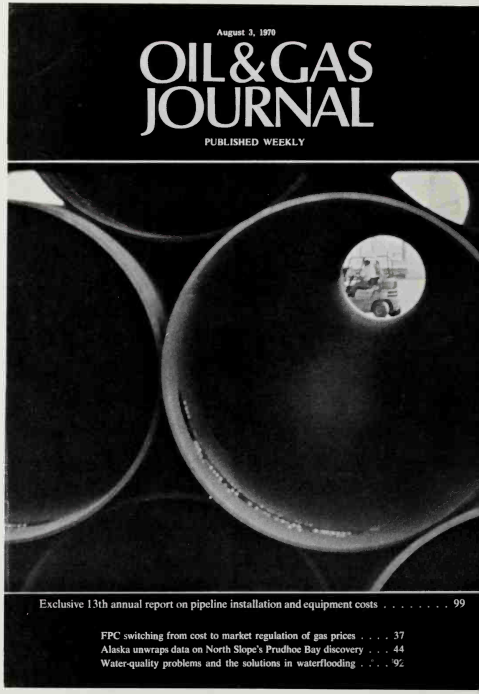
Michigan Farmer, by contrast has a different need: it has no need to attract newsstand buyers, for it is delivered to subscribers. Nor does it have to attract attention to itself by screaming headlines: its attention-getting ploy is fulfilled by the illustration, which is always of some familiar evocative image to which the reader is likely to respond in a positive way. So much, then, for the long-distance appeal. The pick-me-up-and-read-me appeal is concentrated in the window, where four stories are signaled in topic terms as well as in straight headlines. True, the logo and headline windows are indeed intrusions into the background photograph — but the color of the picture helps to overcome them — a factor not discernible here in black-and-white.


MICHIGAN FARMER
AUGUST 2, 1969 75¢
A HARVEST PUBLICATION
Looking toward harvest: How crops and livestock will fare here
Ron Terrell: Farmers must conserve more than soil
Cricket business: Just keeps chirping along
Century-old seed: Those weed seeds can outlive you

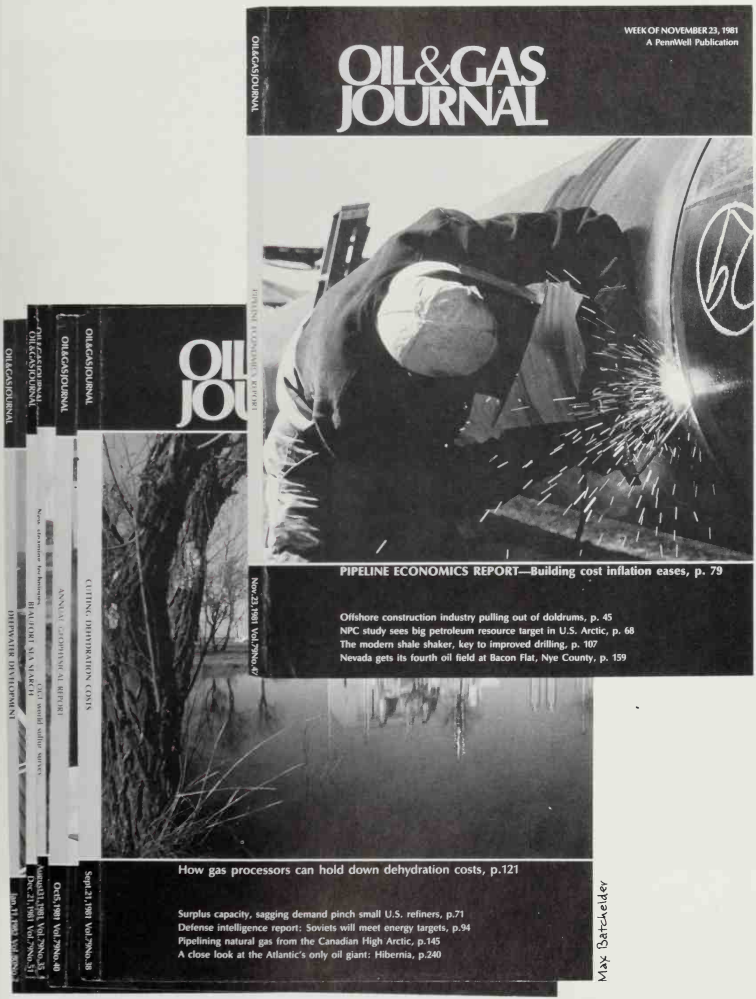
Complex-looking but easy-to-handle format combines standard picture area

To replace the problem of creating, week in and week out, homemade covers with poster value, the fundamental editing/publishing decision was made to standardize the format. The picture area was designated for four-color photography; the cover lines, which, on a newsweekly, demand the latest possible closing time, were deliberately split away from the illustration. That allows the color separations for the illustration to have longer lead time, as they require, while permitting the cover lines literally last-minute revisions. The area in which the cover lines appear is reversed (i.e., white type on black) and the band containing the logo and dateline is also in black, with the logo in yellow. A sliver of space separates the bands from the color picture, both lightening the impression and making assembly much easier. The yellow spine, a well-known characteristic of the publication, was, of course, retained. The new design was introduced in 1970. An updated, fine-tuned amendment to the format done in 1981 is shown opposite.


The OIL AND GAS
JOURNAL
PUBLISHED WEEKLY
JANUARY 1, 1968
NEWS
Offshore rig building to hold high, thanks to hectic action abroad, U.S. lease sales p. 29
Bulging Japanese refining capacity to jump a possible record volume this year p. 48
TECHNOLOGY
Improve equipment, higher standards mean getting the most from pipeline radiography p. 74
TRANSPORTING
LNG

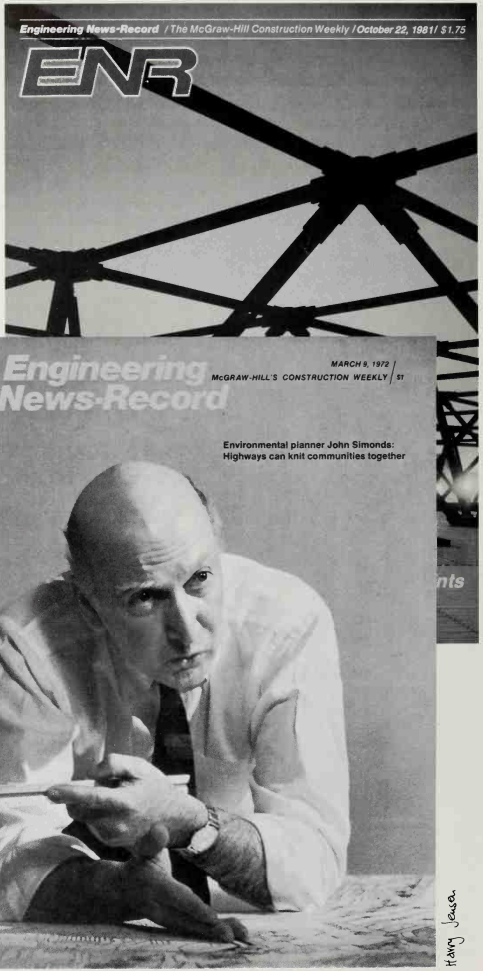

August 3, 1970
OIL&GAS
JOURNAL
PUBLISHED WEEKLY
Exclusive 13th annual report on pipeline installation and equipment costs 99
FPC switching from cost to market regulation of gas prices 37
Alaska unwraps data on North Slope's Prudhoe Bay discovery . . . 44
Water-quality problems and the solutions in waterflooding . . . 92

with black background


OIL&GAS JOURNAL
WEEK OF NOVEMBER 23, 1981
A PennWell Publication
PIPELINE ECONOMICS REPORT—Building cost inflation eases, p. 79
Offshore construction industry pulling out of doldrums, p. 45
NPC study sees big petroleum resource target in U.S. Arctic, p. 68
The modern shale shaker, key to improved drilling, p. 107
Nevada gets its fourth oil field at Bacon Flat, Nye County, p. 159
Nov.23,1981 Vol.79No.47
How gas processors can hold down dehydration costs, p.121
Surplus capacity, sagging demand pinch small U.S. refiners, p.71
Defense intelligence report: Soviets will meet energy targets, p.94
Pipelining natural gas from the Canadian High Arctic, p.145
A close look at the Atlantic's only oil giant: Hibernia, p.240
Sept.21,1981 Vol.79No.38
Oct5,1981 Vol.79No.40
August31,1981 Vol.79No.35
Dec 21 1981 Vol.79No.51
Jan.11,1982 Vol.80No.2
May Batchelder

To help the logo stand out, clean up its surroundings

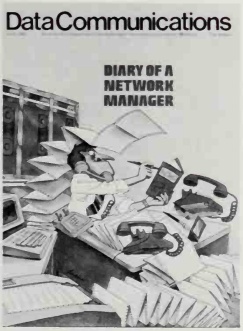
There are notes of six different sizes of type around the "before" of *Engineering News-Record*. In the first "after," the housekeeping facts are pulled together into a relationship with the logo in small italic capitals; the cover line is the only element that appears in different type, as seems appropriate for creating the desired emphasis. The second "after" (by John de Cesare) simplifies the image further by reducing the logo to the acronym by which the publication is known by its readership, and concentrating everything in the single small-type line above. Cover lines are handled as each cover subject demands.


Engineering News-Record / The McGraw-Hill Construction Weekly / October 22, 1981 / $1.75
ENR
MARCH 9, 1972
McGRAW-HILL'S CONSTRUCTION WEEKLY 51
Engineering News-Record
Environmental planner John Simonds: Highways can knit communities together
Engineering News-Record
Piggyback Building
20 Stories of precast concrete one atop each in place garage

Two fundamental departures from the original were made: strengthening the logo, and taking the photo out of full bleed.

The logo, set in a typeface of greater hard-edged strength, was amended to fit the two words into a single visual unit. Notice the overlap of the D and C, the double m, the ns ligature; there are many other detailed refinements of spacing and shaping to personalize the plain type into a monogram logo. All the tightening allowed it to be run much larger than before.

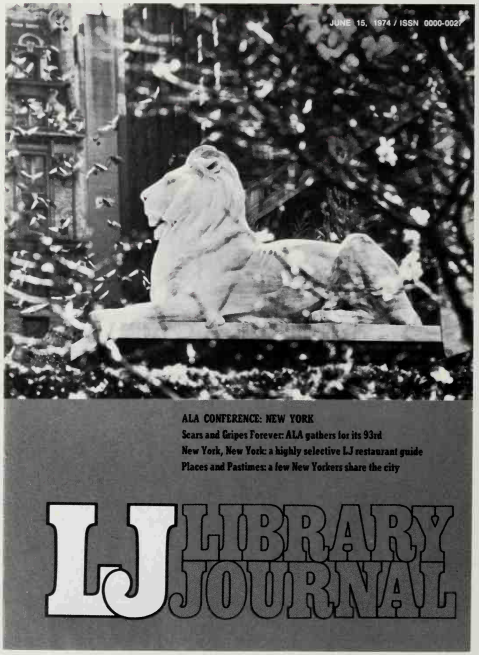
The photo is silhouetted for several reasons: (1) it focuses the reader's attention onto the subject, (2) it encourages unexpected enlargement and courageous cropping — yielding startling poster value, (3) it utilizes the white space as an expansive, bright contrast to the black logo, (4) it allows several cover lines to be placed on the page (here neatly aligned on the D in the logo).



Placement of decorative logo at head or foot of page to add variety

The three examples shown here illustrate the possibilities in logo and cover-line placement that have proved helpful in the design of the covers issue to issue. The logo and monogram as well as the color block in which they appear are deliberately large, for the poster quality of the cover may possibly depend upon them.

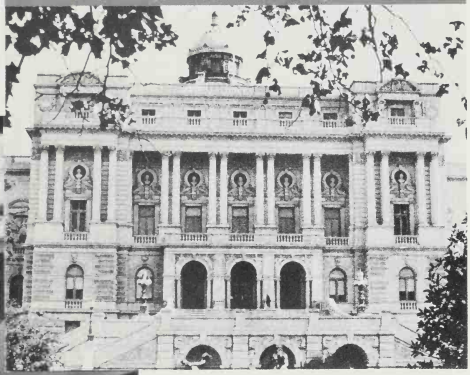
The outlined lettering (of the same family as the department headings and similar to the headline typography inside) allows color manipulation that can be quite decorative. The outline itself can be in white, black, or color; the "inside" of the letters can be run in white, black, or color — as solid, tint, or mixed with a tint of black, or "transparent," as in the example opposite; the panel can be colorful, or grayish, or, as the last example shows, preempted by a full-bleed picture with no dire consequences to the visibility of the logo. The variety of effects thus achievable makes the problem of illustration choice far less crucial than it had been in the past when the cover stood or fell on the success of the visual image alone.

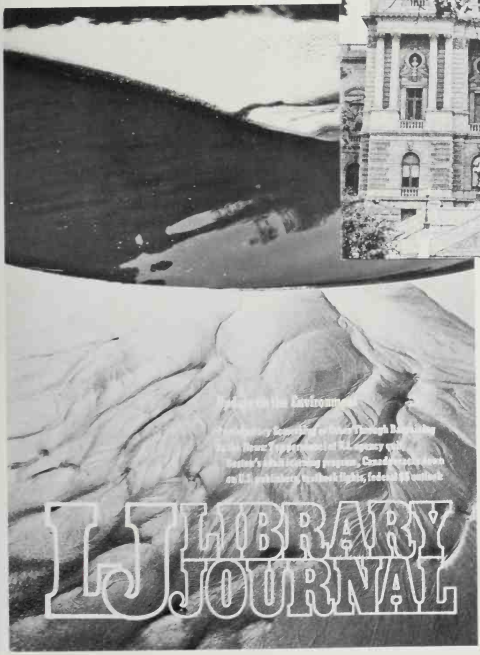

JUNE 15, 1974 / ISSN 0000-0027
ALA CONFERENCE: NEW YORK
Scars and Gripes Forever: ALA gathers for its 93rd
New York, New York: a highly selective LJ restaurant guide
Places and Pastimes: a few New Yorkers share the city
LJ LIBRARY JOURNAL

JULY 1974 ISSN 0363-0277

LJ LIBRARY JOURNAL

Top Priorities for LC: a Mini-Symposium
Placements and Salaries 1973
Price Indexes for 1974
Scientific, Technical, Medical, and Business Books To Come



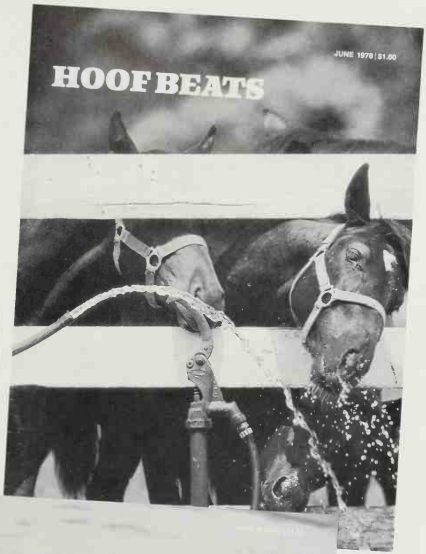


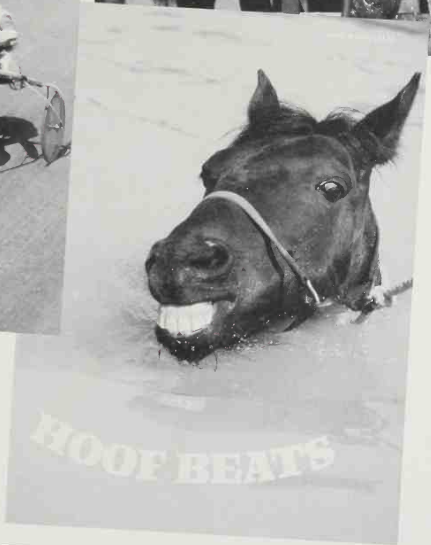
Ellen Raskin

Complete freedom in logo placement is a luxury allowed only where the picture

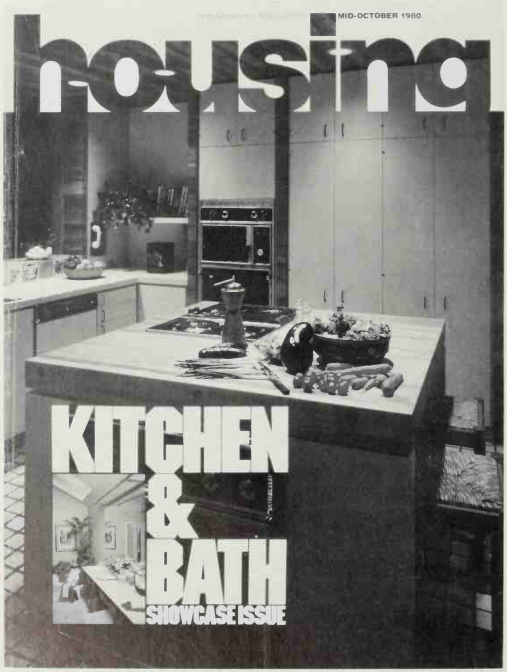
The editorial purpose of the cover on *HoofBeats* is simply to show the glamour of the sport of harness racing. It is assumed that the reader will react with delight and recognition and will be unable to resist opening the issue. Obviously an ample supply of splendid pictures is essential for this ploy.

is the message





Two pictures are more likely to strike a responsive chord than just one

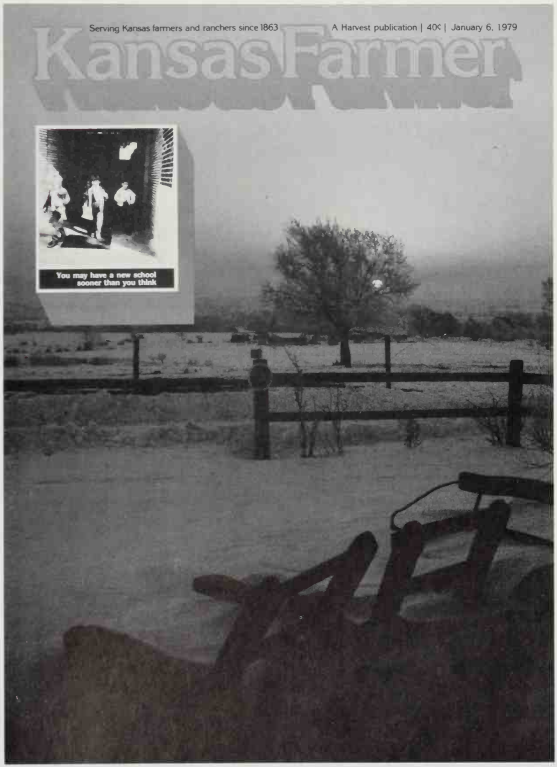


One of the major purposes of the front cover is to get the reader inside: to fascinate him enough so he turns from a mildly interested observer into an enthusiastic reader. Many newsstand magazines have enriched their appeal by adding a tiny picture or two to the large image already there (*Time*, *People*, etc.). The danger, of course, is that by dividing attention, it can cause dilution of impact and some confusion. However, if the trick is done for good reasons, it can serve publishing tactics well.

Housing's special issue covers two subjects of vital importance to its readership. It would be folly to show just one. By inserting the secondary image (coupled with the wording) into a relatively unimportant area of a very strong picture, the poster quality of the large photo is retained, yet the sales message is enhanced. Note, also, the unusual handling of the logo: it is an integral part of the picture.

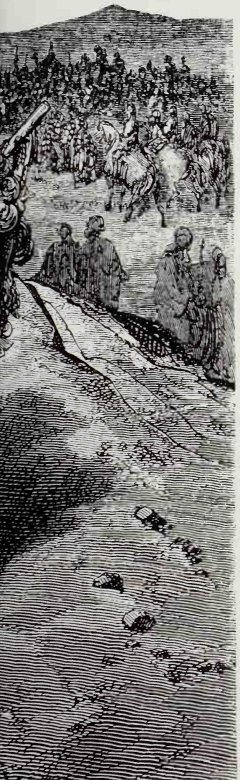
To ensure legibility, it has, indeed, caused some problems in picture choice, since the top of all pictures must be dark enough and not mottled; however, it has given the product a distinct identity.

Kansas Farmer (just like *Michigan Farmer*, page 21) relies on photographs of familiar scenes to put the reader in an accepting mood. Yet it also needs to signal the fact that it is not an armchair travel book, but, rather, a hard-hitting, tabloid-size, biweekly newsmagazine. Since news photos are seldom of good enough quality to warrant full-bleed size, a format was devised that would allow an important news picture to be inserted into the enticing background in a box together with the accompanying headline. The news value of the photo is thus retained, yet the cover can hold on to its tempting mood. The graphics here are reminiscent of the *Industrial Equipment News* cover (see page 16); however, graphics are just the means to an end and the ends are very different.


Serving Kansas farmers and ranchers since 1863
A Harvest publication | 40¢ | January 6, 1979
Kansas Farmer
You may have a new school sooner than you think

The editors' chance to show off their wares

CONTENTS



Once the reader has opened the magazine (because the cover has done its work) chances are that he'll do one of three things:

1. He'll skim through the issue, riffle the pages, stop where fancy strikes him. There is little we can do to influence this kind of reader other than to give him an interesting product we hope will intrigue him.
2. He'll go straight to the cover story (or another story whose title he saw on the cover). Let us hope his interest will be sustained by our efforts and that he'll stay with the magazine for a while.
3. He'll check the contents page to see what else might be worth spending time on. So the contents page should be the instrument by which the editors lead the reader deeper into the issue. It is the editors' second chance to show off their wares.

To succeed, the contents page must be lucid, easy to absorb and simple enough to require no effort on anyone's part to figure it out.

Also, the contents page must appear important, underlining the inherent importance of the material covered by the publication.

Furthermore, the contents page must be easy to find; it must be noticeable as a page, as well as be in a strategic position where the reader cannot miss it. Normally page 3 or page 5 is where someone unfamiliar with the magazine might look for the contents page since they are the most common positions for it. But there are other positions (such as the inside front cover or the first page of the feature section) that can be used. The exact page used matters less than the regularity of its use, since regularity creates habit patterns and reader response. Forcing the reader to hunt for his guide-page is not the best way to win friends and influence people.

There are three kinds of readers who use the contents page:

1. Those who already know what they are looking for in the issue and are merely using the contents page as an index to find the page reference. For them, the editorial matter should be clearly organized and smoothly arranged so that they can skim the page efficiently.

2. Those who need to be sold on what the issue contains. For them, the big ideas (i.e., the headlines) should pop off the page quickly and clearly, and those headlines should be followed by a secondary supportive line that explains the significance of the story from the what's-in-it-for-you angle.

3. Those who would like to know the gist of the major articles without having to plow through them. This pertains less to the "vertical books" that specialize in a narrow segment of an industry or profession and whose readers are probably interested in or affected by everything the magazine has to report, than it pertains to the "horizontal books" which cater to a broad spectrum of readers who may be only peripherally interested in an in-depth study of a specialty not their own but who would like to know about its existence. For them, the contents page should provide a capsule summary of each article.

And then there is another class of contents page users: the many information hunters, such as librarians, or a reader who remembers seeing a story way back in 1967, or even an editor who might need to look up an old issue but is stymied by the index which doesn't have the proper cross-reference. These people need the contents page as a fast index. For them, the material should be efficiently organized, too, according to a system that is logical for the particular publication — either by interest area, by author, by subject, by date of development, by personality being written about, or other suitable organizing principle.

Quite obviously no one page arrangement can possibly succeed in pleasing all these groups. Nor should it try. As in all matters of design in publications, the editors must first make up their minds about what they want the page to accomplish. The publisher may be allowed some input here, too! Once the direction is set, a page makeup can be devised to fit the particular mix deemed appropriate and desirable.

But before we get into that, it is necessary to list all the many elements that need to be shoehorned into this page. Not all publications necessarily require every single one of them — yet it is amazing how much can be packaged into a little 8⅛" x 10⅞" rectangle. There are many publications that, mercifully, allow the various elements of front matter to be split among several spaces. But that is part of the *solution*. First, here's the problem:

- The table of contents itself, showing departments, headlines of the major stories (with, possibly, a secondary line for each), bylines, photographers' credits, interest-area labels, and, of course, page references.

- A label such as "contents". I have always waged war against this tautological requirement; after all, what else can this page be, IF it looks what it is?

- The logo for identification.

- The slogan of the publication, often helpful in defining the readership served.

- An historical reference to the longevity of the publication ("Founded in 1863") or the absorption of snob value antecedents ("Incorporating the *Cement Pourer*").

- The date of publication and volume and number information as required by law and librarians.

- Listing of the editorial staff shown in descending order of rank from the Editor down, giving name and function (some even with telephone numbers for quick access by the readership). To editors, their name and relative position in the hierarchy are of great concern. Changing the typographic makeup of these listings is perhaps the most dangerous of all ventures in magazine design and should never be attempted without protective armor.

  The business staff is also often listed below the editors, but the advertising sales staff is normally listed on the advertising index page and the advertising sales director usually appears on both.

  Some publications also require listing of professional advisors, publication committee members, association directors, and so forth.

- Association affiliations, usually in the form of heraldic emblems of questionable aesthetic value.

- The masthead: all the essential publishing information including the parent company, officers, address, etc.; also information about the frequency of publication, addresses of publication offices, where to submit manuscripts, where to complain about subscription problems or note change of address, and so on and so forth. The United States Post Office requires some of this material to appear within the first five pages of the periodical for it to qualify for second-class postage privileges. Hence — and to simplify makeup — much of the rest of the related material is run with it.

  This masthead information could go on a vertical one-third, combined with the list of editors; or it could be combined with a "Letter from the Publisher" and go on a vertical two-thirds; or it could become the gutter element in a full page, combined with the table of contents itself. Or it can become one element in a multipage sequence.

The word "masthead," strictly speaking, describes just the business information about the publication. It has, however, been broadened to cover the list of editors, and, by implication, the entire space in which it is run. So, sometimes, even the logo is misnomered the "masthead" (when it isn't being called the "flag").

✳ A miniature of the front cover, with its caption and credits.

✳ A paragraph or two announcing Coming Attractions.

✳ Miniatures of pictures to dress up the page (as editors say) or to act as signals for features inside.

✳ Trumpeting a special article by abnormal treatment in bold type, color, boxing, or even actual separation from the mainstream of the contents.

Obviously there is enough material. What happens when this plethora of raw information gets assembled without benefit of editing-by-design? Here are a few of the most typical errors.

⊘ Too much material for the space allotted — so much so that the reader turns away in terror, refusing to plow through all *that*, preferring to take his chances at finding something of interest by simply flipping through the pages. This is called the Blivet School of Contents Page Makeup (two kilograms of offal in a one-kilogram bag). It tends to be counterproductive.

⊘ Insufficient grouping; the page is gray all over. Size is a sign of importance; the editors must make sure that the hierarchy of type size corresponds to the editorial value each item has (though there must not be too many sizes). Also, the space between elements must be manipulated to group related subjects into visually logically organized arrangements — by tightening up within a group and enlarging the moats of space that separate one group from another.

⊘ Staff names too large (yes, that *is* possible) or, more likely, the job title overwhelms the name in the staff listings.

⊘ Masthead material set in a face so small and dark that it looks like a smudge.

⊘ The "Bugs" (the armorial bearings of the associations) too large by contrast to the surrounding typography, so that the eye cannot help but alight on them.

⊘ Slogan too overbearing.

⊘ Date and volume information too large.

⊘ The "coming next month" and "cover" information floats, fighting the table of contents. This happens because these two items are normally written as running copy, whereas the table of contents is written tersely in tabular fashion. The two kinds of writing (and its typographic visible form) do not work well together unless the nontabular matter is graphically treated as subservient to the tabular.

The way in which the material is organized on the page varies with the goals the editors have set. It also depends on the kind of publication being designed, the number of pages available, the number and kind of pictures to be accommodated, the nature of the readership, and the same considerations which affected the design of the cover also have a bearing here.

For instance, a publication whose pride lies in the distinguished roster of its authors must have a page arrangement that displays their names prominently; on the other hand, one whose source of pride lies in its breadth of coverage of an entire industry requires an arrangement that gives prominence to the interest-area labels which indicate that breadth.

Another example: A general interest newsmagazine requires a minimal listing of departments for quick reference to page numbers; on the other hand, a "slower," more specialized periodical is justified in devoting several pages to the contents using ample space to run short summaries of the authoritative articles.

Evidently, designing a page that *works* is a tricky business, requiring much finesse both in journalistic understanding (to express what the editors require) and in design capacity (to make that mass of unrelated bits and pieces sit on the page quietly, neatly, as if they belong, yet give the page an overall graphic quality that will make the reader stop and look).

Tricky though it be, there are some basic patterns that most contents pages follow, in spite of the fact that there are probably as many contents page designs as there are contents page designers. A number of these designs are shown in the examples that follow, some of them as "before-and-after" examples to make the style points clear. Following the example pages is a catalog of ideas in sketch form.

8 **How to measure thinking**
As clerical work becomes a bigger and bigger part of the industrial scene, industrial engineers must learn to set standards on mental activity
Emerson O. Bocipple, Jr., Leon A. Kelly

17 **Scheduling technique evens out maintenance work load**
Computerized handling of routine maintenance cycles allows each job to be carefully prepared for the craftsman
Nesa L. Wu

22 **Production control via the bill of materials processor**
Computerized bill-of-materials files improve production and inventory control by eliminating the reliance on statistical quantities
Nicolai Siemens, Jack R. Byrd

34 **How WWII boosted the American labor movement**
Despite legislation that limited their bargaining power, this period saw unprecedented growth in union strength and influence
M. J. Fox, Jr., S. A. Brooking, L. T. Thompson

41 **Memo to supervisors: learn to listen**
In learning to communicate effectively, a supervisor spends a great deal of time in listening. Here are a few do's and dont's to becoming an effective listener
David F. Gibson

42 **Public Law #91-596—a landmark in safety legislation**
This legislation, designed to consolidate and enforce a wide range of safety standards, should be of vital interest to industrial engineers
Jerry D. Ramsey

44 **Desk-top computer is always at your fingertips**
Portable mini mini-computer cuts time for engineering calculations from hours to minutes in a product design department

46 **Warehouse relayout cuts operating costs**
Warehousing costs can be reduced by simply reorganizing the placement of commodities to avoid congestion of order selectors
David B. Brown

49 **What's in it for me?**
The non-member IE will ask this question when you aim at Goal 100. Here are answers to help you
Jack F. Jericho

IE
CONTENTS
VOLUME 3 NO. 7

Departments—
2 Authors
6 Letters
7 Opinion
52 Around the Institute
53 Members in the news
55 AIIE news roundup
58 IE digest
59 A word with you
60 Books
63 Software
64 Calendar
65 Transactions

Cover: "The Thinker," Auguste Rodin, 1878-89.

The material contained in the "before" as well as the "after" is identical: important headlines of each article; short descriptions of each article; bylines; department names; page numbers; and the ancillary logo, dateline etc.

By reorganizing the available space and articulating each story by means of horizontal rules that separate one from the next, a clear overview of the entire issue is achieved. The page numbers are in a row at the far right edge. The departments, which, as relatively minor elements on the contents page, merely require a page reference for ease of finding, are run ahead of and following the feature section in the sequence in which they appear in the issue. The feature section is emphasized by using the full page width, and by allowing the first several words of the headlines to be seen against clear white space. Note that the typeface of the headlines is no blacker or larger than that used in the "before" version. The white space at the top of the page allows space for expansion when more items are included in abnormally fat issues.

Most magazine pages are designed to fit specifically on a left-hand page (or a right-hand page). To put them in a space for which they were not suited would spoil the scheme. To make it quite clear whether a page is a LEFT or a RIGHT, these curved lines indicating the page opposite are shown in all the examples in this book, where such understanding is essential.

IE INDUSTRIAL ENGINEERING CONTENTS

A word with you 4
AIIE news roundup 6
Members in the news 8

Three steps to productivity improvement DONALD C. BURNHAM 12
The Chairman of one of our largest corporations discusses productivity, and proposes a three-prong Federal Government program to improve its growth.

Estimating electronics assembly costs W. R. LASHER, D. B. WECHSLER 17
Presenting a computerized method of developing assembly cost estimates almost immediately, with more than acceptable accuracy.

The conflict between industrial engineering and industrial relations PAUL JENNINGS 22
The President of IUE writes frankly of what workers and unions think are flaws in IE, and how they would like to see IE's apply professionalism.

Queuing model of a hospital emergency room W. BLAKER BOLLING 26
Studies at this hospital resulted in formulation of a model that helps administration and medical staffs to improve planning for facilities and staffing.

IE's take on urban problems STANLEY KLEIN 32
After a modest beginning three years ago, more and more units of New York City's government are establishing industrial engineering organizations.

Work measurement: Concepts of normal pace MITCHELL FEIN 34
The second of two articles on "Work measurement today" proposes *definitions* of normal pace that could be applied universally.

AIIE's new home: Atlanta 40
You are invited to the dedication of the new Headquarters building September 22. And while you're here, look at Atlanta as a business location.

Simple system squeezes costs PAVAN RAI 46
This cost control system was designed to help boost productivity, control labor and downtime, and provide the means for standard costing.

New products and literature 50
IE Digest 54
Books 58
Software 60
Calendar 61
Letters 62

Two contents pages whose design is based on the importance of the headlines

This page from *Engenheiro Moderno*, the Brazilian publication, is designed to demonstrate the wealth of material in the issue: it is the "muchness" that matters primarily, and secondarily, the intrinsic interest of the articles themselves. The "April" logo (the month name is used in lieu of the word "contents") and the 1,2,3,4,5 emphasize this muchness. The numerals are also used at the head of each story inside the issue. The headlines and the story summaries are strong and highly visible, because they are staggered in the space, each element visible against the white, rather than mixed up together (as the heads and summaries are in the "before" example on page 38). The angular and somewhat heavy character of the typography and design is appropriate to the subject and professional readership of the publication. Departments are referred to at the foot of the page, and the cover is in the left-hand margin.

ABRIL

1
Tinta anti-térmico amplia proteção dos instalações industriais
Uma resina de características especiais, capaz de retardar por meia hora ou mais a ação do fogo, oferece uma nova maneira de ajudar a combater incêndios 9

2
Redução de 52% nos custos de fundição de peças
Um novo equipamento, surgido na Alemanha, que usa sistema de fundição a quente de magnésio, proporciona à indústria metalúrgica grande redução nos custos. 13

3
A reformulação do layout permite duplicar a produção
Por meio de uma adequada renovação do layout, a GTE-Sylvania produzirá mais, em menos tempo e reduzindo os custos de mão-de-obra. 22

4
Modelo matemático não eliminou as plantas-piloto
O artigo sintetiza o trabalho de um grupo de professores universitários brasileiros, para mostrar as tendências técnico-científicas da Engenharia Química. 28

5
Vantagens e perigos de um novo sistema gerencial - o APO
Uma análise da APO — Administração por Objetivo — já adotada por muitas empresas — a qual exige uma readaptação funcional nos níveis superiores da hierarquia. 37

CARTA DO EDITOR 3
NOTICIA 5

1

Beneath the attention-getting frieze of random-size pictures that refer to their stories by page number, the entire contents are organized about the vertical column of page numbers. These run sequentially as in the issue, from top to bottom, down the middle of the page. The department headings and story summaries are placed to the right of this column spine, and the page could exist as it is and make sense.

But weaving across this vertical presentation, are horizontal modules defined by hairline rules, a single module per feature story. Story headlines extend to the farthest left edge of the page. They could be (and are) discerned by themselves: they are a simple list of titles, extremely easy to read, one after the other. Thus the page has a one/two punch: first the titles can be skimmed, then the summaries that might be of interest, and later the position of the items in the issue can be looked up. On the surface it looks like a complex system; but it is easy to figure out, especially since the heads are nice and black and pop out from the page. It also helps to read Spanish.

Both schemes make use of the two-level readership principle ("skim-reading") primary information is shown large and bold, so it can be read easily and first. Secondary information, useful as supporting the primary, is run smaller and lighter. The reader can thus save time & effort by skipping what is uninteresting.

índice

42 78 89 119

8 Memorandum
14 Cartas
17 Noticiario internacional
40 Médicos e Instituciones

Subdesarrollo tuberculosis: ¿Hasta cuándo? 42 Aunque muchos creen que se trata de una enfermedad superada, la tuberculosis aún hace estragos entre las clases humildes

Paro . . . ¿Existe realmente la alta fidelidad? 52 Ocho pruebas para ayudarlo a comprar el equipo de reproducción de sonido más perfecto

Test para reconocer los signos de una deformación congénita 66 Cómo desenmascarar falsos síntomas para llegar a la verdad de un complicado caso de cirugía pediátrica

Le ginacobstetricia, ¿cambiará sus reglas básicas? 78 Menos obstetricia y mas ginecologia en el futuro de esta especialidad que, sin embargo, espera fuerte crecimiento

Accidente: la Ley lo protege más da lo que Ud. crea 89 El accidente automovilístico ha dejado de ser el vicacrucis que Ud. temía, siempre y cuando conozca las nuevas leyes

Frontera Norte: promisorio mercado de salud 104 Análisis médico y económico de los estados fronterizos que demuestra una situación más bonancible de lo que se cree

Radiografía del comic: los ideales da nuestra generación a $ 1.00 por semana 119 Una introspección sico-sociológica demuestra que los comics no son puramente obras de ficción

131 Consultorio económico-legal
137 Congresos y Cursos
141 Libros
148 Nuevos productos

Actualización científica
AC2 Condensaciones de artículos científicos
AC10 Resúmenes de trabajos científicos
AC40 Discusión diagnóstica

5

This contents page has to include the staff list as well as the masthead, forcing the actual contents information into a vertical shape. To clarify the structure at first glance, the heavy vertical rule was inserted as a separator between masthead and contents, but the two elements are tied together by the logo that spans the entire page and acts as a headline for both.

In the masthead area, the staff names and functions were reset one to a line since there is ample room available; the logo of the parent company was pushed into the logical position next to the business information about the publication (the masthead, which was kept unchanged).

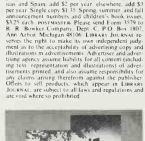
The illogical placement of the miniature reproduction of the front cover picture was changed: it had no relationship whatever to the masthead material (though the *width* of the column, as a shape, was appropriate — but that is a very wrong reason for putting an item in a space!). Instead, the picture was shifted into direct relation with the cover story headline where it makes complete editorial sense. Not only does this

XEROX

LIBRARY JOURNAL

Editor-in-Chief: John N. Berry III. *Associate Editor:* Shirley Havens. *Staff Writer:* Kathleen Norman Parrish. *Assistant Editors:* Ellen Mangan, Barbara Rollock. *Contributing Editors:* Lillian Biermann Gerhardt, Albert Miller. *Book Review Editor:* Janet Fletcher. *Associate Editors:* Irene Stivers Lund, Anneliese Schwarzer. *Senior Review Editor:* Robert B. Harris. *Production Editor:* Marjorie Chapman. *Assistant Editors:* Cora A. Hauser, Linda Ferguson, Katharine Scott Kyle Arnold, Janet Mahoney, Deborah Pritchett. *Editorial Assistants:* Betty-Lee Yost, Ann Sarkas. *Art Director:* Ann Thomas. *Assistant Art Director:* Ernest Bialek. *Production Manager:* J. Kent. *Publisher:* Paul J. Cartese.

LIBRARY JOURNAL is published by R. R. Bowker Co. (a Xerox company). Direct editorial and advertising correspondence to 1180 Avenue of the Americas, New York 10036. Telephone (212) 764-5100. All other correspondence to R. R. Bowker Company, Dept. C, P.O. Box 1807, Ann Arbor, Michigan 48106. Telephone (313) 761-4700. Second-class postage paid at Ann Arbor, Michigan and additional mailing offices. Copyright © 1973 Xerox Corporation. LIBRARY JOURNAL is indexed in *Library Literature, Library & Information Science Abstracts* and *Reader's Guide to Periodical Literature.* Volumes begin in Jan., Feb., Mar., Apr., May, June, July, Aug., Sept., Oct., Nov., Dec. Subscription rates: $42.00 U.S. and Canada and Postal Union of the Americas and Spain; add $7 per year elsewhere; add $1 per year Single copy $4.00. Spring, summer and fall announcement numbers and children's book issues, $5.25 each. POSTMASTER: Please send Form 3579 to R. R. Bowker Company, Dept. C, P.O. Box 1807, Ann Arbor, Michigan 48106. LIBRARY JOURNAL reserves the right to make its own independent judgment as to the acceptance of all contributions and all illustrations in advertisements. Advertiser and advertising agency assume liability for all content (including text, representation and illustrations) of advertisements printed, and also assume responsibility for any claims arising therefrom against the publisher. Offers to sell products, which appear in LIBRARY JOURNAL, are subject to all laws and regulations and are void wherever prohibited.



FEATURES

Academic Library Building in 1973
Construction costs are up, but the number of libraries built has dropped below last year's figures — two of the findings of this year's survey
BY JERROLD ORNE . . . 3511

Public Library Building in 1973
A statistical report on 143 public library building projects completed in the U. S. A. during the year ending June 30, 1973
BY HOYT GALVIN & BARBARA ASBURY . . . 3517

Public Libraries . . . 3525
Lacombe, Louisiana; Prospect Heights, Illinois; Jacksonville, Florida; Pittsburgh, Pennsylvania; Kings Park, Virginia; Rapid City, South Dakota; Memphis, Tennessee; Lindstrom, Minnesota; Glendale, California; Greenville, Pennsylvania; Boston, Massachusetts; Sioux Falls, Idaho

Two-Year College Learning Resources Center Building . . . 3529
35 new building projects reveal an expanding definition of learning resources
BY JOLIEN BOCK

DEPARTMENTS

Letters . . . 3485
Calendar . . . 3486
Editorial . . . 3489
News . . . 3491
People . . . 3509
Professional Reading . . . 3532
Checklist . . . 3535
Magazines . . . 3536
Buyers' Guide . . . 3539
Classified . . . 3583
Index To Advertisers . . . 3586

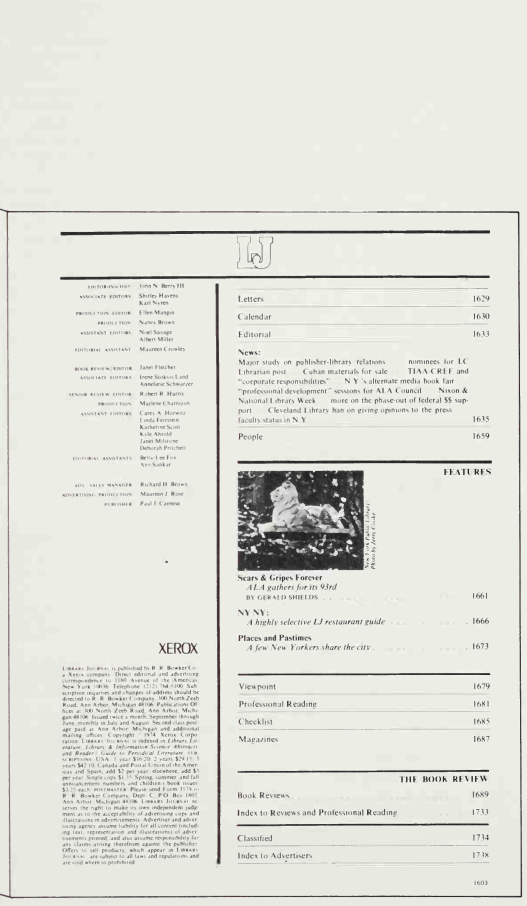
THE BOOK REVIEW

Book Reviews . . . 3541

Cover: *Clockwise, starting from the bottom, these new libraries are: the Skokie Public, Illinois; the James Michener Branch,* Bucks County, Pennsylvania; Loudon State College, Vermont; Loyola-Notre Dame, Baltimore; and the Cherokee County Public, South Carolina (*Lawrence S. Williams, Inc. photo)*

remove the necessity of running a separate descriptive caption for the picture, but it also dresses up the contents column, and it allows the headline to act as caption, too. The cover story gains importance just by this simple change.

The contents themselves are displayed in the sequence in which they occur in the issue, item by item. However, the clarity of presentation is muddied by the necessity of expressing three levels of importance for these elements. On the first level of importance are the *Features* and the *Book Review*. (Hence the bold rules and the all-cap logos.) The second level is the *News* — not deserving of bold rules, but requiring long listing of item heads and a boldface logo. On the lowest level of importance are the individual departments which are designated simply by name and page reference and a separating hairline rule. Whether this ranking is effective is debatable; whether it is even necessary is also questionable. In a page as complex as the contents, the simpler and more logical it can be, the better.



EDITOR-IN-CHIEF John N. Berry III
ASSOCIATE EDITORS Shirley Havens
Kaul Nyrop
PRODUCTION EDITOR Ellen Mangels
PRODUCTION Nancy Brown
ASSISTANT EDITORS Noel Savage
Albert Miller
EDITORIAL ASSISTANT Maureen Crowley

BOOK REVIEW EDITOR Janet Fletcher
ASSOCIATE EDITORS Irene Stokvis Lind
Anneliese Schwarzer
SENIOR REVIEW EDITOR Robert R. Harris
PRODUCTION Marlene Charmzon
ASSISTANT EDITORS Carey A. Horton
Linda Ferreiro
Katherine Scott
Kate Ahrold
Janet Mulcrone
Deborah Pritchett
EDITORIAL ASSISTANTS Betty-Lee Fox
Ann Sunkar

ADV. SALES MANAGER Richard H. Brown
ADVERTISING PRODUCTION Maureen J. Rose
PUBLISHER Paul J. Cartone

XEROX

LIBRARY JOURNAL is published by R. R. Bowker Co., a Xerox company. Direct editorial and advertising correspondence to 1180 Avenue of the Americas, New York, NY 10036. Subscription orders, subscription inquiries and changes of address should be directed to R. R. Bowker Company, 300 North Zeeb Road, Ann Arbor, Michigan 48106. Publications Office at 300 North Zeeb Road, Ann Arbor, Michigan 48106. Issued twice a month, September through June, monthly in July and August. Second class postage paid at New York, NY and at additional mailing offices. Copyright © 1974 Xerox Corporation. LIBRARY JOURNAL is indexed in *Library Literature, Library & Information Science Abstracts and Readers' Guide to Periodical Literature*. Subscriptions: USA: 1 year $39.50, 2 years $74.00, 3 years $42.50. Canada and Postal Union of the Americas and Spain, add $5.00 per year for postage. Foreign, add $7.50 per year for postage. Single copies $2.00. Spring, summer and fall conventions numbers and children's book issues $3.50 each postpaid. Please send Form 3579 to R. R. Bowker Company, Dept. C, P.O. Box 1807, Ann Arbor, Michigan 48106. LIBRARY JOURNAL reserves the right to make its own independent judgments as to the acceptability of advertising copy and illustrations in advertisements. Advertiser and advertising agency assume liability for all content (including text, representation and illustrations) of advertisements printed, and also assume responsibility for any claims arising therefrom against the publisher. Offers to sell products, which appear in LIBRARY JOURNAL are subject to all laws and regulations and are void where so prohibited.

Letters 1629
Calendar 1630
Editorial 1633

News:
Major study on publisher-library relations . . . nominees for LC Librarian post . . . Cuban materials for sale . . . TIAN CREE and "corporate responsibilities" . . . N.Y.'s alternate media book fair . . . "professional development" sessions for ALA Council . . . Nixon & National Library Week . . . more on the phase-out of federal $$ support . . . Cleveland Library ban on giving opinions to the press . . . faculty status in N.Y. 1635
People 1659

FEATURES

Photo by Carol Bowar
Photo by James Fraser

Sears & Gripes Forever
ALA gathers for its 93rd
BY GERALD SHIELDS . . . 1661

NY NY:
A highly selective LJ restaurant guide . . . 1666

Places and Pastimes
A few New Yorkers share the city . . . 1673

Viewpoint 1679
Professional Reading 1681
Checklist 1685
Magazines 1687

THE BOOK REVIEW

Book Reviews 1689
Index to Reviews and Professional Reading 1733

Classified 1734
Index to Advertisers 1738

1603

The "before" and "after" examples from *Chemical Engineering* contain the same material, but the "after" has been rearranged to emphasize what is editorially important: service to the reader. And it attempts to do it as clearly and flexibly as possible within a tight framework. This is a typical case of *editing*, using that term in an organizational, visual, graphic, and placement sense. It is also a case of quite simple rearrangement of space and emphasis through typographic sizing and "color."

The "before" left-hand page appears spotty (though each individual element on it is certainly nicely visible.) It is not sequentially organized, however, because it pulls the feature report out of its proper turn and separates the regular features from the other stories. This organization reflects the editors' judgment of the relative importance of the various elements, but it does so at the cost of muddling the reader who finds it hard to know where to look or how to use the page as a reference guide.

The right-hand page also leaves much to be desired in its basic arrangement: much valuable white space is wasted at the top (if the logo weren't so large, then the white space might possibly have been useful in attracting attention to the spread; but the large logo PLUS all this space is overkill). The summaries themselves — which are the main point

Chemical Engineering

CHEMICAL TECHNOLOGY FOR PROFIT-MINDED ENGINEERS

Contents

FEATURE REPORT 94
Are Long-Distance Pipelines Getting Safer?
Following five years of federal regulation of long-distance pipelines, CE takes another look at their safety picture. In natural-gas lines, there appears to be little change. Liquid-line leaks are down by a half. But there are still problems that remain to be resolved.

CHEMENTATOR 49

NEWS FLASHES 55

NEWS FEATURES 58
Stemming Hazardous Spills—56
Maintenance Is Costing More—60
AIChE Is Information Rich—64

PROCESS TECHNOLOGY 68
Methanation Routes Ready

NEW PRODUCTS & SERVICES 70
ISA Show Opens in New York

ENGINEERING FEATURES 94
Pipeline Safety (Report)—94
Using Boolean Algebra and Logic Diagrams—II—101
Specifying Control Valves—105

YOU & YOUR JOB 116
Technical Meetings: Get Your Money's Worth

OPERATION & MAINTENANCE 120
Selecting In-Plant Dust-Control Systems

CExchange 128

OTHER REGULAR FEATURES

EDITOR'S PAGE 6
CONVENTION CALENDAR 7
TECHNICAL BOOKSHELF 9
CPI NEWS BRIEFS 132
MANUFACTURERS LITERATURE 135
EMPLOYMENT OPPORTUNITIES 144
INDEX OF ADVERTISERS 154
REPRINTS NOW AVAILABLE 156
READER SERVICE POSTCARD 157
ECONOMIC INDICATORS 160

THE COVER

Symbolized are two potential design areas that are receiving new and effective emphasis: hazardous spills and pipelines. For details, see articles starting on pg. 54 and 94.

IN THE NEXT ISSUE

Installed cost of corrosion-resistant piping changes in the engineering construction business; properties of chemicals (Part 5); management tools; Part 22 of the engineering economics refresher series; preparing for planning; Polish natural gas; management by objectives.

Front cover this issue 72,350

OCTOBER 14, 1974/CHEMICAL ENGINEERING

Highlights Of This Issue

A LID ON HAZARDOUS CHEMICALS—58
This week, a tough law governing the handling and transport of hazardous substances, particularly chemicals, is scheduled to go into effect. Though enforcement will be delayed while the regulatory parameters are better defined, the new law ups penalties to $5 million and hits hard at barge transport.

INFLATION HITS MAINTENANCE TOO—60
A recent survey of petroleum refiners identifies where the major rises in maintenance costs are coming. As might be expected, the chief culprits are the higher costs of labor and materials.

GOOD TOPICS CROWD AICHE AGENDA—64
The program for the Salt Lake City meeting of AIChE was better than usual and both attendance and interest were high. Discussed here are coal processing, ammonia production, and electrocyanic syntheses.

METHANATION COMES OF AGE—68
Substitute natural gas based on coal or heavy oil is too low in heating value for general fuel uses, because of its high hydrogen-carbon monoxide makeup. Several nickel-catalyst schemes are now able to methanate the raw SNG to a high-Btu fuel of pipeline quality.

LOGIC DIAGRAMS FOR BATCH PROCESSES—101
This last article of a series on Boolean algebra and logic diagrams shows how flipflops can be used in logic diagrams. It also shows how rather-complicated batch processes can be represented.

SPECIFYING CONTROL VALVES—105
Sizing and selecting control valves requires an extensive knowledge of process plant design and valve manufacturers' practices—a knowledge that is further extended by recent innovations in valve design. This article brings into one description the scattered information required to handle the problem.

YOUR MONEY'S WORTH FROM MEETINGS—116
Was the last meeting you attended a disaster? Did you return with a single idea worth the time and money you spent attending it? Meetings are too frequently disappointing. You can make even a poor meeting worthwhile—pick up useful information and make valuable contacts—if you prepare properly.

SELECTING DUST-CONTROL SYSTEMS—120
In designing a dust-control system, it is important that the correct design be selected from the very beginning to provide room for expansion, to minimize costs, and comply with OSHA and EPA regulations.

Chemical Engineering, October 14, 1974, Vol. 81, No. 22—**Chemical Engineering** (with Chemical & Metallurgical Engineering, published beneath each publication as an individual publication) is published 24 times a year (monthly except semimonthly in January, March, July, August, September, October, November, December) by McGraw-Hill, Inc. Executive, Editorial, Circulation and Advertising Offices: McGraw-Hill Building, 1221 Avenue of the Americas, New York, NY 10020. Telephone: (212) 997-1221.

Subscriptions: Available only to professional engineers. Chemical Engineering is not available to libraries or other institutions. Subscription rates: Directed Distribution: U.S. and Canada, $15 per year; all other countries, $30 per year. Controlled Circulation: U.S. and Canada, $15 per year; all other countries, $30 per year. Single copies: $2.00 each. Subscriptions are solicited only from persons who are engineers. Subscription orders must be accompanied by payment unless the subscriber is a company that has established credit with McGraw-Hill. Subscriptions are not transferable. Allow four weeks for change of address. Please send both old and new address, including zip code, and if possible, a recent address label. Publication number (USPS 594-040) is assigned by the Post Office Department.

Officers of the Corporation: Shelton B. Avery, Chairman of the Board; Harold W. McGraw, Jr., President; Robert N. Landes, Senior Vice President and Secretary; John J. Cooke, Vice President and Treasurer; Robert E. Slaughter, Vice President, Controller; Edward E. Lanahan, Jr., Executive Vice President, Publications Group; Ralph R. Schulz, Executive Vice President, Business Development; Robert L. Gardner, Executive Vice President, Corporate Relations.

Officers of the Corporation: Shelton B. Avery, Chairman of the Board; Harold W. McGraw, Jr., President; Robert N. Landes, Senior Vice President and Secretary; John J. Cooke, Vice President and Treasurer; Robert E. Slaughter, Vice President, Controller; Edward E. Lanahan, Jr., Executive Vice President, Publications Group; Ralph R. Schulz, Executive Vice President, Business Development; Robert L. Gardner, Executive Vice President, Corporate Relations.

Second class postage paid at New York, N.Y. and at additional mailing offices. Postmaster: Send Form 3579 to Fulfillment Manager, Chemical Engineering, P.O. Box 430, Hightstown, NJ 08520. Circulation audit conducted by Business Publications Audit of Circulation, Inc. Copyright © 1974 by McGraw-Hill, Inc. All rights reserved. The contents of this publication may not be reproduced either in whole or in part without the consent of the copyright owner.

Printed in U.S.A. All rights reserved. The contents of this publication may not be reproduced either in whole or in part without the consent of the copyright owner.

Editorial Advisory Board: Donald S. Barnes, Vice President, Engineering, Union Carbide Corp.; Robert E. Driscoll, Jr., Vice President, Manufacturing, Monsanto Co.; Walter J. Mead, Professor of Engineering, University of California; Arthur F. Murphy, Vice President and Director of Research, Atlantic Richfield Co.; Charles S. Robinson, Consulting Engineer; Howard C. Vogel, Vice President, Worldwide Engineering, Union Carbide Corp.

Executive, Editorial, Circulation and Advertising Offices: McGraw-Hill Building, 1221 Avenue of the Americas, New York, NY 10020. Telephone: (212) 997-1221.

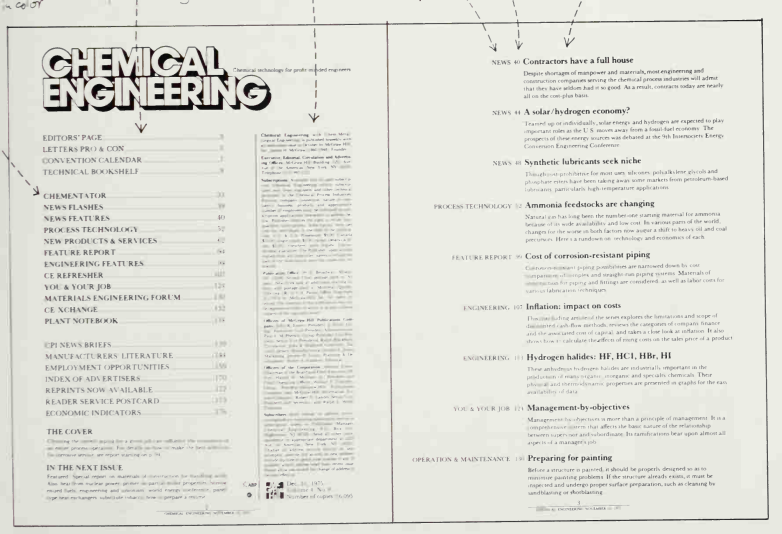
Subscriptions: Available only to professional engineers. Chemical Engineering is not available to libraries or other institutions. Subscription rates: Directed Distribution: U.S. and Canada, $15 per year; all other countries, $30 per year. Controlled Circulation: U.S. and Canada, $15 per year; all other countries, $30 per year. Single copies: $2.00 each. Subscriptions are solicited only from persons who are engineers. Subscription orders must be accompanied by payment unless the subscriber is a company that has established credit with McGraw-Hill. Subscriptions are not transferable. Allow four weeks for change of address. Please send both old and new address, including zip code, and if possible, a recent address label. Publication number (USPS 594-040) is assigned by the Post Office Department.

of the whole page — are squeezed between an unnecessary headline and the masthead at the foot of the page. The summaries certainly read as a *listing*, but there is a slowness, a lack of urgency, an ordinariness about them, which detracts from their purpose of exciting the reader and encouraging him sufficiently to open the issue and find out more about the fascinating material outlined here.

The "after" shows the ruthless reorganization of the same material deemed necessary to make the most of the hidden opportunities. First of all, the available space was reorganized: the masthead was pulled off the right-hand page and set in a narrow vertical column hidden in the gutter of the left-hand page. That way the right-hand page was freed of encumbrances and could be developed as a full page of important-looking summaries. The space remaining on the left side of the left-hand page could be used for placing a simplified sequential listing of the entire issue in a single, wide column. This page pretends to be nothing more than a listing — and, as such, is excellent for reference. It sells nothing, summarizes nothing, dresses up nothing. All it does is *inform*. The selling job is left to the summaries on the opposite page. The cover blurb and next-issue blurb are run at the foot of this listing to separate them from the summaries.

The result of the reorganization is that instead of four intertwined columns of material crossing the spread, there are now just three; but each of these three is clearly self-contained, naturally expressive of its own material. The shapes and the contents fit each other — that's what makes the spread easy to understand.

Two details should be noted: the features listed on the left-hand page are set bold and run in color to give them extra visibility; and the various articles emphasized on the right-hand page are classified by their departments by means of the free-standing headings, so that initial reference as well as cross-reference to the listing opposite can be made easily.


Run in color
Sequential listing
Masthead
Folio
Department
Summary
CHEMICAL ENGINEERING
Chemical technology for profit-minded engineers
EDITORS' PAGE ... 3
LETTERS PRO & CON ... 8
CONVENTION CALENDAR ... 5
TECHNICAL BOOKSHELF ... 9
CHEMENTATOR ... 33
NEWS FLASHES ... 39
NEWS FEATURES ... 40
PROCESS TECHNOLOGY ... 59
NEW PRODUCTS & SERVICES ... 62
FEATURE REPORT ... 94
ENGINEERING FEATURES ... 94
CE REFRESHER ... 103
YOU & YOUR JOB ... 125
MATERIALS ENGINEERING FORUM ... 130
CE XCHANGE ... 132
PLANT NOTEBOOK ... 138
CPI NEWS BRIEFS ... 139
MANUFACTURERS' LITERATURE ... 144
EMPLOYMENT OPPORTUNITIES ... 150
INDEX OF ADVERTISERS ... 170
REPRINTS NOW AVAILABLE ... 172
READER SERVICE POSTCARD ... 173
ECONOMIC INDICATORS ... 176
THE COVER
IN THE NEXT ISSUE
NEWS 40 Contractors have a full house
NEWS 41 A solar/hydrogen economy?
NEWS 48 Synthetic lubricants seek niche
PROCESS TECHNOLOGY 52 Ammonia feedstocks are changing
FEATURE REPORT 59 Cost of corrosion-resistant piping
ENGINEERING 103 Inflation: impact on costs
ENGINEERING 103 Hydrogen halides: HF, HCl, HBr, HI
YOU & YOUR JOB 125 Management-by-objectives
OPERATION & MAINTENANCE 138 Preparing for painting

Two consecutive right-hand pages: the "road map" on the first,

INDICE

9 MEMORANDUM

16 MEDICINA ES NOTICIA

36 HABLAN LOS LECTORES

VACACIONES EN EL CARIBE MAS BARATAS QUE EN EUROPA 38

10 COCTELES PARA DAR VIDA A SUS REUNIONES SOCIALES 52

GUIA PARA PERFECCIONAR SUS FOTOGRAFIAS EN COLOR 72

ESQUEMA PARA INSTALAR EL SONIDO EN SU CONSULTORIO 80

COMO PUEDE UD. IMPORTAR INSTRUMENTAL SIN PROBLEMAS 86

QUE LE OFRECE REALMENTE LA GARANTIA DE SU AUTO 94

EL FONDO FEPAFEM—ICETEX FINANCIA SU POSGRADO 102

SMOG: ¿LOGRARA UD. VOLVER A VER EL CIELO? 108

120 ULTIMOS LIBROS

126 CONGRESOS Y CURSOS

SC1 SINTESIS CIENTIFICA MUNDIAL

SC48 DISCUSION DIAGNOSTICA

summaries on the second

This is a variation of the spread shown in the preceding example; the two pages are used similarly. Page 1, here, has a clearly placed sequential listing of the contents of the whole issue. The page numbers form the demarcation line between features and departments. The departments branch off to the right (and are styled to look like miniatures of the logo). The feature titles lead into the numbers from the left.

Page 2 repeats the feature titles and the pattern of the page numbers but fleshes out each title with a summary of the article. The outside space, used for department headings on page 1, is utilized here for the attention-getting pictures.

As a point of interest: these two pages were redesigned, combined into one, when space in the publication became scarce. The page shown here, therefore, is the "before"; the "after" is on page 41.

INSTANTANEA DE MM

VACACIONES EN EL CARIBE MAS BARATAS QUE EN EUROPA **38**

Durante sus próximas vacaciones usted puede salir de lo común, viajando al Caribe: Jamaica, Cayman Islands, Haiti, Bahamas. Más cerca y más barato que Europa, encontrará lugares maravillosos para el descanso en medio del singular ambiente afroantillano. Planee su viaje preferido y tenga en cuenta las siguientes indicaciones.

10 COCTELES PARA DAR VIDA A SUS REUNIONES SOCIALES **52**

Sus convites pueden ganar incomparablemente en éxito y cordialidad con estas bebidas sabrosas, originales y bien presentadas, que dejarán un recuerdo duradero en el paladar y la memoria de sus agasajados.

GUIA PARA PERFECCIONAR SUS FOTOGRAFIAS EN COLOR **72**

Ud. puede iniciarse en los secretos de las técnicas para perfeccionar sus fotos en color, aprovechando estas indicaciones producto de la experiencia de peritos en este arte.

ESQUEMA PARA INSTALAR EL SONIDO EN SU CONSULTORIO **80**

Tener un buen sistema de sonido en su consultorio depende menos del precio que del equilibrio entre sus elementos y la adecuada disposición de las cajas acústicas, según le demuestran aquí algunos peritos y varios colegas suyos.

COMO PUEDE UD. IMPORTAR INSTRUMENTAL SIN PROBLEMAS **86**

Traer al país instrumental científico es menos complicado y oneroso de lo que generalmente se cree. Esta sencilla guía lo orientará acerca de los trámites previos que usted deberá realizar para importar el equipo que ambiciona.

Contents on a page and a spread

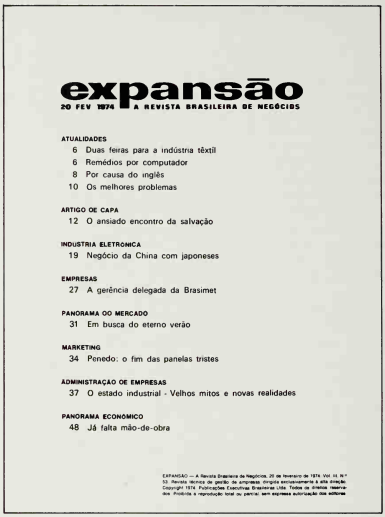
The "before" and "after" shown in this example illustrate a comparatively superficial redesign. The spaces were already well defined: the first page is a "road map" of the issue as a whole, the succeeding spread contains the summaries of the articles in this Brazilian business magazine. The redesign merely clarifies the elements, improves their legibility, and adds a little decorative color.

On page 1, the page numbers become the organizing spine for the page; the interest-area designations read in from the left, the headlines read out at the right. This format is much more legible than the "before" handling which just overlaps the same material, and uses the available space to its full potential. The masthead lines are widened, becoming a base for the whole page, and the logo is placed higher. The date becomes the focal point for the page.

In the succeeding spread, the logo is dropped altogether since the miniature of the front cover, suffices to identify the page. Removing this element allows smooth alignment of the tops of the four text columns, which is emphasized by the double rule that runs across both pages. This smoothness becomes a good contrast to the pictures, which are taken out of alignment and are toyed with in random, overlapping fashion. In the presentation of the summaries, the page numbers are, again, emphasized by a variety of techniques, including underscoring. Beneath the underscore are the headlines. Bunching of the type on the left-hand edge of each headline leaves clean, white gaps at the right-hand edges which act as foils to the type, making it appear darker than it in fact is. The pattern of typography within each column is strong enough to allow random column lengths at the foot of the page (the columns "hang" down from the horizontal rule). This makes makeup somewhat easier. The vertical rules between columns help to "clean up" each column.

befores →

afters →



expansão

20 FEV 1974 A REVISTA BRASILEIRA DE NEGÓCIOS

ATUALIDADES
6 Duas feiras para a indústria têxtil
6 Remédios por computador
8 Por causa do inglês
10 Os melhores problemas

ARTIGO OE CAPA
12 O ansiado encontro da salvação

INDUSTRIA ELETRONICA
19 Negócio da China com japoneses

EMPRESAS
27 A gerência delegada da Brasimet

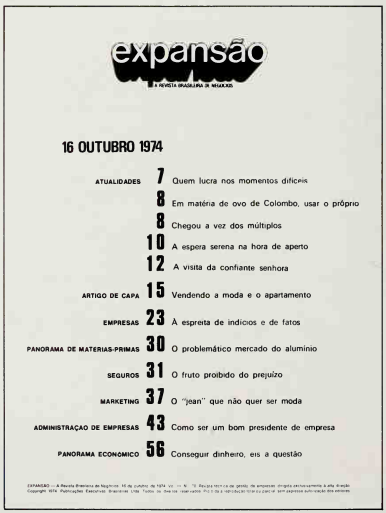
PANORAMA OO MERCADO
31 Em busca do eterno verão

MARKETING
34 Penedo: o fim das panelas tristes

ADMINISTRAÇAO OE EMPRESAS
37 O estado industrial - Velhos mitos e novas realidades

PANORAMA ECONOMICO
48 Já falta mão-de-obra

EXPANSÃO — A Revista Brasileira de Negócios, 20 de fevereiro de 1974, Vol. III, N.º 53. Revista técnica de gestão de empresas dirigida exclusivamente à alta direção.
Copyright 1974, Publicações Executivas Brasileiras Ltda. Todos os direitos reservados. Proibida a reprodução total ou parcial sem expressa autorização dos editores.



expansão

A REVISTA BRASILEIRA DE NEGÓCIOS

16 OUTUBRO 1974

ATUALIDADES 7 Quem lucra nos momentos difíceis
8 Em matéria de ovo de Colombo, usar o próprio
8 Chegou a vez dos múltiplos
10 A espera serena na hora de aperto
12 A visita da confiante senhora
ARTIGO DE CAPA 15 Vendendo a moda e o apartamento
EMPRESAS 23 A espreita de indícios e de fatos
PANORAMA DE MATERIAS-PRIMAS 30 O problemático mercado do alumínio
SEGUROS 31 O fruto proibido do prejuízo
MARKETING 37 O "jean" que não quer ser moda
ADMINISTRAÇAO DE EMPRESAS 43 Como ser um bom presidente de empresa
PANORAMA ECONOMICO 56 Conseguir dinheiro, eis a questão

EXPANSÃO — A Revista Brasileira de Negócios, 16 de outubro de 1974, Vol. — N.º 72. Revista técnica de gestão de empresas dirigida exclusivamente à alta direção.
Copyright 1974, Publicações Executivas Brasileiras Ltda. Todos os direitos reservados. Proibida a reprodução total ou parcial sem expressa autorização dos editores.

Stephen Bogro, diretor-superintendente geral da Fábricas Pelar, como conseguiu, com uma equipe de executivos profissionais, recuperar a empresa que há vários anos vinha perdendo dinheiro

(Foto de Ulrich Swiss)

pág. 6

pág. 6 pág. 19 pág. 27 pág. 34

expansão

O conteúdo resumido deste número

Duas feiras para a indústria têxtil 6
Os negócios fechados na XVII Feitt chegaram a 200 milhões de dólares, segundo o diretor da Feira, Pedro Paulo Lambeglia. Uma quantia superior em cerca de 60% à da feira do ano passado. Em 1974, como a procura de produtos têxteis e de equipamentos para a fabrica-los-cresceu muito, haverá duas Feitts. No de junho (de 8 a 16), não entrarão as máquinas e as vendas serão de artigos para o pronto-wear

Remédios por computador 6
Em São Paulo, uma farmácia inconum está demonstrando ser que possível a máquina pode competir com ou substituir o homem. Implantada há três meses, depois de uma experiência cercada de êxito na calçada de Rio Claro, interior de São Paulo, a Droga Mec já realiza cerca de duzentas vendas diárias. E pretende duplicar essa marca em pouco tempo

Por causa do inglês 8
O problema de Hamilton Borges de Queiroz era aparentemente simples: como milhares de pessoas, ele precisava falar inglês. Porém, esbarrava sempre em dificuldades de tempo, dinheiro, inibição ou motivação. Até que resolveu acabar com elas e criou o Sistema Integrado de Domicílio English Course Ibgbes. O êxito foi tão grande que ele agora prepara a incursão de sua empresa por outras áreas educacionais

Os melhores problemas 10
Para os empresários do auto-serviço, o ano de 1973, marcado pela escassez de produtos como carne, leite em pó e outros, mostrou que é preferível enfrentar a falta de produtos do que a de compradores. Os problemas causados pela escassez não foram suficientes para impedir um crescimento das vendas da ordem de 50% nem para arrefecer esperanças para 1974, ano em que se prevê crescimento ainda maior

O ansiado encontro da salvação 12
Em janeiro de 1972, quase três anos depois de o grupo Brascan assumir o seu controle, a Peixe (Industrias Alimentícias Carlos de Britto S. A.) não só ainda não tinha recuperado nem um pouco do mercado perdido para a concorrência, desde meados da década de 60, como a sua situação se deteriorara mais, com os prejuízos crescendo sem parar. Foi aí que um novo grupo de administradores, o quarto desde 1969, decidiu aplicar a "teoria do efeito do guarda-chuva", e acabou encontrando nela o ansiado caminho da salvação da empresa.

Negócio da China com japoneses 19
A Sharp S A. Equipamentos Eletrônicos é uma empresa que procura incessantemente aproveitar, de forma racional, as oportunidades criadas pelo *boom* desenvolvimentista. Se em Manaus fica mais barato instalar uma fábrica, por que não ir para lá? Em menos de quatro anos, consegiu ocupar 60% do mercado de calculadoras eletrônicas (segundo seus diretores) e está lançando seu televisor através do sistema de venda direta ao consumidor.

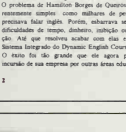
A gerência delegada da Brasimet 27
As múltiplas atividades da Brasimet Comércio e Indústria S. A. asseguram sua rentabilidade. E, por outro lado que parece, é justamente a autonomia delegada as gerências de departamentos que garante os bons índices de rentabilidade em todos os setores. A partir de 1971, a empresa abria seu capital e, em pouco tempo, saldava compromissos de longo prazo, diminuia custos financeiros e ameaçava um capital de giro capaz de dar aos seus executivos a tranquilidade suficiente para continuarem traçando ambiciosos planos de desenvolvimento do setor industrial.

Em busca do eterno verão 31
O mercado de bronzeadores apresenta um crescimento considerável e constante de 15% ao ano, mas está apenas começando no Brasil. Para os fabricantes, o dentinete depende apenas da educação dos consumidores, que, por enquanto, mal se iniciam nesse indefinível culto à cor da pele.

Penedo: o fim das panelas tristes 34
A Penedo linha a imagem de uma indústria acabada. E só começou mudá-la no dia em que decretou o fim das panelas tristes, lançando uma moderna e colorida linha de utensílios de cozinha. Tanto bastou para se lhe abrirem as portas antes inacessíveis dos grandes supermercados e magazines do país. Depois disso, as vendas não param mais de crescer, quase que da plicando em apenas um ano

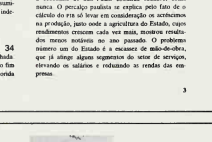
O estado industrial — Velhos mitos e novas realidades 37
Em *The New Industrial State*, J. K. Galbraith descreveu a indústria moderna como um conjunto de colossos inflexíveis e que satisfazem a si próprios. Indícios recentes, apresentados pela primeira vez neste artigo, originalmente publicado na *Harvard Business School*, mostram que Galbraith descreve o "velho" estado industrial, não o novo. Da mesma forma, o autor sustenta que os remédios drásticos que ele e seus seguidores recetitaram para colocar de novo as grandes companhias "sob controle" — nacionalização, controle de preços e medidas semelhantes — são irretievantes no caso.

Já falta mão-de-obra 48
A economia paulista cresceu menos que a brasileira no ano passado, 11 contra 11,4% Mas, na verdade, a economia de São Paulo continua vandável como nunca. O percalço paulista se explica pelo fato de o cálculo do rrit só levar em consideração os acréscimos na produção, justo onde a agricultura do Estado, cujos rendimentos cresceu cada vez mais, monitora resultados menos notáveis no ano passado. O problema número um do Estado é a escassez de mão-de-obra, que já atinge alguns segmentos do setor de serviços, elevando os salários e reduzindo as rendas das empresas.



Adolpho Lindenberg, da construtora que leva seu nome (cinta, na página de capa) firma edição sua estratégia para construir e vender imóveis de alto padrão

(Foto de Michel Zabé)



7
Quem lucra nos momentos difíceis
Com a escassez de papel, muitas fábricas de formulários para computadores imaladas no país ficaram em situação difícil. Uma delas, contudo, a Moore Formulários Ltda., não só previu essa crise como conseguiu ampliar razoavelmente sua participação no crescente mercado brasileiro

8
Em matéria de uso de Colombo, usar o próprio
Como sempre para seus produtos, a Bud Brasileira descobriu um "uso de Colombo" — o próprio, devidamente encaixado, de pé, entre as letras e e u da palavra Som. Enquanto procura fatiar seu mercado com aperfeiçoamentos nas fitas de gravação e com lançamentos de discos, a empresa prepara-se para aumentar sua penetração nos mercados interno e externo

8
Chegou a vez dos multiplos
Com a falta de crédito e os efeitos da inflação sobre o poder aquisitivo do consumidor o mercado de automóveis vai perdendo o ritmo que caracterizou os últimos meses de 1973. Contudo, este problema, ao que ele indicaram à Isbit, Fusion de Ano Multiplo, Ltda., introduzir no quinto mesmo em São Paulo, se quiser uma residência ja caracterizado no Flamengo, Ipanema e Leblon, mas normalmente trabalhou com luxo e classe apurados.

10
A espera serena na hora de aperto
Mitoo Adachi, presidente da representação da Japan Trade Center em São Paulo não parece assustado com os prováveis reflexos das crises que afligem o comércio mundial. Pelo menos a decisão brasileira de limitar a importação de bens supérfluos deverá afetar as vendas de equipamentos de som no mercado brasileiro. Mas nem isso conveceu Adachi e sua equipe a tomar uma crise passividade oriental.

12
A visita da confiante senhora
No Brasil para o lançamento da Skin Life, uma nova linha de produtos de beleza, mas Mila Rubinstein, sobrinha e herdeira de Helena Rubinstein, passou a sua se satisfeito, devido à aceitação da marca em todas as fases de consumo, e sua confiança no desenvolvimento desse setor do mercado

15
Vendendo a moda e o apartamento
A Universitária Adolpho Lindenberg percebeu que para os diferenciais da concorrência, precisaria não apenas se preocupar em vender apartamentos e escritórios de luxo para os clientes de melhor poder aquisitivo da população. Era preciso vender uma certa moda em construção para dar aos negócios a rentabilidade de que precisava.

23
A espreita de indícios e de fatos
A Siemens S. A., braço brasileiro de uma avantajada corporação multinacional, não acredita que a atual desordem econômica mundial represente ameaça imediata para uma indústria que, como ela, não produz para o mercado consumidor final. Mas, cuidadosamente, ela se aprotuma dos clientes para acompanhar de perto os seus negócios, e reflete sobre alguns indícios de problemas futuros, entre eles a queda de 9% nas vendas para a indústria de eletrodomésticos

30
O problemático mercado do aluminio
A produção brasileira de alumínio só da para atender à metade da demanda interna e, por isso mesmo, a indústria que usa o metal como matéria-prima é escrava dos desígnios do mercado mundial, onde não há CIF que de jeito nas livres inclinações alistas.

31
O fruto proibido do prejuizo
A primeira vista, a Companhia de Seguros do Estado de São Paulo (Cosesp) pode parecer mais uma empresa pública sem chance de gerar dinheiro. Operando numa ampla fixita do mercado, entretanto, a empresa atingiu um lucro líquido no ano passado correspondente a mais da metade do seu capital social de 29,7 milhões de cruzeiros. Em áreas de nítido interesse social, onde seria sua obrigação perder dinheiro — é o caso do seguro rural —, a Cosesp sai lucrando

37
O jean' que não quer ser moda
A Levi Strauss do Brasil, subsidiária de uma empresa que vende semanalmente 3,5 milhões de jeans no mundo, está vendendo aproximadamente 50% do que pretendia em suas previsões iniciais. O que fazer? A Levi's está-se reorganizando para superar esta fase de recessão do consumo.

43
Como ser um bom presidente de empresa
Os problemas mais sérios de uma organização comercial exigem e devem merecer a atenção exclusiva do principal homem da empresa. E mais: parece que há razões sérgaviveas para que estes problemas sejam cercados ovariavelmente de sigilo e cuplo. Na artigo transcrito da Harvard Business Review, o professor Joseph C. Bailey mostra que há um desmembrador comum para aqueles que sabem enfrentar os problemas mais sérios em suas empresas.

56
Conseguir dinheiro, eis a questão
Com a redução do prazo de permanência dos recursos externos no país de dez para cinco anos, o governo espera obter um fluxo de 6 bilhões de dólares, ao o final do ano. As dificuldades no mercado mundial porem persistem e não dão mostras de um afrouxamento pelo menos por enquanto. As taxas de juros sobre os empréstimos variam, ainda, entre 42 e 46% ao ano — perspectiva pouco animadora para quem necessita de obter um acréscimo de déficit em sua balança comercial

Quite a different approach to spatial organization is shown in this contents page solution. The sequential flow of the material is there, the various headlines are there, but the organization is based on yet another criterion: reflecting the book's division into five sectors. But two important elements must be disposed of first: the logo and dateline and the staff listing. The former are in the best, most visible reference position on the spread — the top right-hand corner. And the staff listing, in its light and restrained type dress, is positioned at the far left. This, too, is an important position on the spread (but, then, the staff listing is also important). The use of pale type helps to separate the listing visually from the contents and its many boldface elements.

The space left over after the logo and staff listing are positioned, is then defined by the very strong horizontal rule, which becomes the major graphic organizing element of the spread.

Suspended from the rule are five separate columns, each dealing with one sector of the issue — all familiar to the readership. The strength of the horizontal element is such that it allows the columns to be of random length, as the material requires.

The sequence of placement of the elements within the columns follows the sequence in which they appear in the issue (with a few minor exceptions). The reference to next month's issue is an element that does not quite fit the pattern, and, as such, is somewhat jarring. However, placing it at the very end of the flow minimizes the problem; it seems impossible to invent a system that will fit all exigencies.

The miniature reproduction of the front cover illustration appears, with its credits and description, perched atop the horizontal rule and, therefore, is clearly the starting point of the entire sequence, in much the same way that a large upstanding initial draws the eye to the start of a column of text.

THE RECORD REPORTS

11 Editorial

4 Letters-calendar

11 News in brief

15 News report

40 Buildings in the News

46 Design awards-competitions

51 Books received

150 Office notes

ARCHITECTURAL BUSINESS

53 Image-building for architects
a guide to public relations

57 Causes and effects of 1981's office building boom

DECEMBER 1983 ARCHITECTURAL RECORD

FEATURES

63 Three designs by Murphy/Jahn
Chicago projects designed by Helmut Jahn include a railroad topped with 1.4 million square feet of offices, a Daniel Burnham building renovated for 20th-century energy needs, and a subway terminal at O'Hare Airport.

68 Space-age imagery for the world's largest computer center
Architects Hellmuth, Obata & Kassabaum's design for this Kansas City facility accurately reflects not only a specialized mechanical function, but the necessity and importance of large size for the building type.

74 Two interiors by R.M. Kliment & Frances Halsband Architects
Clarity of order and elaboration of detail characterize the New York and Boston offices of a multinational brokerage and banking firm.

80 House in Concord, Massachusetts by Peter Forbes & Associates
A very lively addition transforms an old farmhouse without disturbing its essentially rural character.

86 Mitchell/Giurgola build a gateway to Stamford, Connecticut
The marble-clad facades of a speculative office building create a monumental portal for commuters entering a downtown business center.

BUILDING TYPES STUDY 569

92 Rooms with a viewpoint
A side-trend accompanying the current boomlet in hotel construction by a diverse roster of developers is the emergence of special-purpose hotels with facilities geared to the needs of a well-defined target clientele. Examples in the study range from a casino hotel in Atlantic City to a cottage hotel in Dallas.

93 Harrah's Marina Hotel Casino Atlantic City, New Jersey
Welton Becket Associates, architects

98 Hotel Meridien Houston Houston, Texas
Lloyd Jones Brewer & Associates, architects

102 Hyatt Regency Woodfield Schaumburg, Illinois
Skidmore, Owings & Merrill, architects

106 Carleton House Dallas, Texas
Cullinan Payne & Bischoff with David K. Gately, architects

ARCHITECTURAL ENGINEERING

108 Avoiding wall problems by understanding structural movement
Guidance for architects and engineers on the interaction of structural and enclosure systems is presented by Dr. Charles Thornton, president of Lev Zetlin Associates.

112 Product reports

138 Office literature

157 Semi-annual index

148 Classified advertising

162 Advertising index

165 Reader service inquiry card

NEXT MONTH IN RECORD

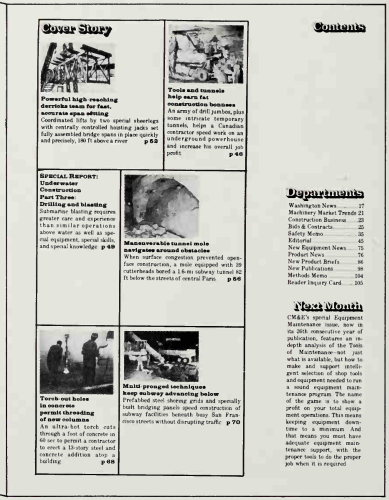
Building Types Study: Urban Planning
Jonathan Barnett, architect and urban designer, in an article which demonstrates that urban design can be more than pictures of future improvements, asserts that the type of physical planning is actually a continuous process of adjustment, encouragement and management. Among the many projects included in the case studies presented by Barnett are the Pittsburgh Plate Glass Headquarters by Johnson and Burgee, the redesign of Market Square by Hardy Holzman Pfeiffer, the Dravo Building by Welton Becker, the Oxford Center development by HOK and the redesign of Grant Street by Environmental Planning and Design Associates.

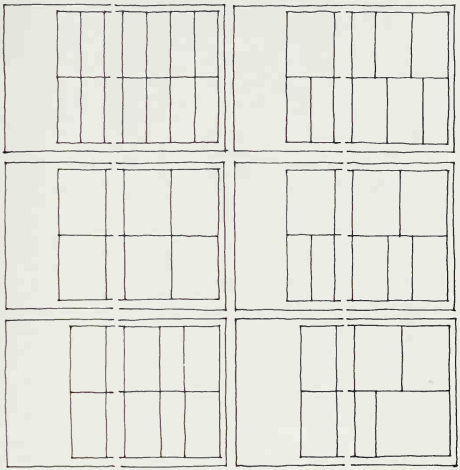
Contents page designs based on flexible picture-and-caption units

In *Construction Methods & Equipment* magazine, the feature stories are deliberately played up on the contents page, and the departments merely listed alongside. Each story must be shown not only with a headline, but with a summary and a picture as well. Naturally, the headlines have to be long, the summaries flexible in length, and the pictures of any shape necessary . . .

To make the assembly of such hopelessly complex pages possible without each one turning into a major design problem, a series of predesigned grids was worked out, such as the ones shown here. The principle behind this technique, of course, is the one of camouflage, or misdirection of the reader's consciousness from the comparative messiness of the items themselves, to the smooth neatness of the containers in which they are encased. It is packaging, pure and simple — but it works, especially when the grid is run in color. The examples shown here are typical of the single-page and spread versions of the system.

Single-page version
The "net" of rules is run in color


Cover Story
Powerful high reaching derricks team for fast, accurate span slicing
Coordinated lifts by two special shearlegs with centrally controlled boating jacks set fully assembled bridge spans in place quickly and precisely, 190 ft above a river p 52
Tools and tunnels help earn fat construction bonuses
An army of drill jumbos, plus some intricate temporary tunnels, helps a Canadian contractor speed work on an underground powerhouse and increase his overall job profit p 40
SPECIAL REPORT: Underwater Construction
Part Three
Drilling and blasting
Submarine blasting requires greater care and experience than similar operations above water as well as special equipment, special skills, and special knowledge p 49
Maneuverable tunnel mole navigates around obstacles
When surface congestion prevented open-face construction, a mole equipped with 29 cutterheads bored a 1.6-mi subway tunnel 82 ft below the streets of central Paris. p 56
Torch-cut holes in concrete permit threading of new columns
An ultra-hot torch cuts through a foot of concrete in 60 sec to permit a contractor to erect a 13-story steel and concrete addition atop a building p 68
Multi-pronged techniques keep subway advancing below
Prefabbed steel shoring grids and specially built bridging panels speed construction of subway facilities beneath busy San Francisco streets without disrupting traffic p 70
Contents
Departments
Washington News 17
Machinery Market Trends 21
Construction Business 25
Bids & Contracts 35
Safety Memo 46
Editorial 47
New Equipment News 75
Product News 84
New Product Briefs 86
New Publications 89
Methods Memo 204
Reader Inquiry Card 205
Next Month
CM&E's special Equipment Maintenance issue, now in its 26th consecutive year of publication, features an in-depth analysis of the Tools of Maintenance—not just what is available, but how to make and support astute-gent selection of shop tools and equipment needed to run a sound equipment maintenance program. The name of the game is to show a profit on your total equipment operations. This means keeping equipment downtime to a minimum. And that means you must have adequate equipment maintenance support, with the proper tools to do the proper job when it is required



This simple column grid is the basis for the six arrangements at right. Many more are possible as required to accommodate the requisite number of stories in the issue (or their relative importance shown by size).

Contents

Departments

Construction Report 17
Machines: Market Trends 23
Construction Business 24
Safety Memo 29
Editorial 33
Product News 47
Product Briefs 74
New Publications 76
Methods Memo 86
Letters of Response 87
Reader Inquiry Card 89

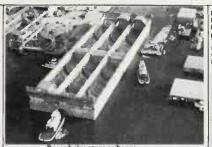
Next Month

Excavators and backhoes are used for much more than just digging trenches. The attachments available for hydraulic excavators and backhoes can transform them from pavement breakers to downside drivers to trenchers to compactors to cranes and all within one work shift. In this article, CM&E examines the proliferation of attachments that multiply productivity, capability, and profitability of our machines.

Cover Story

Adaptable shoring sets up fast for deep digging cycles
Special shoring frames with assemblie and retractable shoring panels team with long-reaching hoes for high-production in a deep sewer job. p 34

Regulating method stabilizes building settlement in soft earth
Thanks to a "control pile" system, a bayfill with a flat slab foundation built on a spongy site in Western City will be immune to the haphazard tilting and settling that affect adjacent buildings in the highly unstable soil. p 60



Record-size storage barge requires concrete casting and prestressing expertise
Applying casting and prestressing techniques developed on previous building construction projects, a contractor cast a mammoth post-tensioned barge (for storing liquified gas) 12 ms faster than shipbuilders estimated for the job. p 37

Lasers give bit performance in accurate guidance role
Two laser beams, equipped to align in vertical and horizontal planes, help contractor teams follow intricate cylindrical building for test exact horizontal angles. p 62

Piling system replaces unstable foundations
Working in restricted space, without noise or vibration, a Dutch shoring system jacks concrete piles into the ground, section by section, to support existing structures foundering in bad soil. p 49

Special Report

PRECAST ROUNDUP: Innovative installation and landing techniques cut costs and boost production
Using an extensive range of lifting, lowering, pushing, pulling, and rolling methods, resourceful contractors have developed ingenious ways to handle large-scale concrete components on jobs ranging from high-rise buildings to underwater construction. p 53

four-column makeup

Volume 93 No. 2 Contents February 1980

ESQUIRE

5 Backstage with Inquiry
5 The Sound and the Fury
6 Politics
8 Ethics
10 Unconventional Wisdom
15 Rolling into the Eighties
28 The War of the Razors
42 Out of the Rough and Into the Slammer
60 Clothing
72 Pajama Drama
79 Sam Shepard
89 Personal Finance
91 Outdoors
95 High Life
96 Movie Classics
8* Books

Esquire, April Silver

Simple sequence with pictures placed in relation to story headlines. Page/Topic/Title/Byline/Description clearly shown.

CONTENTS

80 61 92 71

EDITORIAL
Fresh X
by Kate Rand Lloyd

LETTERS

LAW
What's Yours When You Quit?
by Elizabeth Elliot and Wendy Sucol

ISSUES
The Middle Aging of America
by Landon Y. Jones

TECHNOLOGY
Phone Systems
by Tobor Sullivan

ON THE JOB
The Winning Interview
by Sherry Chaplain

ON THE ROAD
Buying a New Car
by Janet Guthrie

WASHINGTON
Economic Equity Act
by Stephen Bonks

CAREERS
The Foreign Service
by Wesley J. Wirth

TRAVEL
Stamford and Greenwich
by Polly Guiler

MEMORANDA
This Month's Notables

SUCCESS
The Buck Starts Here
by Margaret Phan

WORK
The Luck Factor at Work
by the Staff of Collegiate

FASHION
Clothes for All Seasons
Produced by Jane Hailes

PRODUCTIVITY
East Meets West—The Quality Circle
by Susan Avitabo

FOOD
Colored Fossils
by Susan & Hargrave

MBA
Management Business Advice

IN BUSINESS
Your Ailing Company
by Albert J. Lowry

COMMENT
The Plant in the Grey Flannel Pot
by Marvallen Hessel

HEALTH
Losing Weight
by Susan Maus

THE ARTS
Basically Movies
by Patricia Bosworth

MY SIDE
Marsha Mason and Neil Simon
by Babette Plutzik

Working Woman, Tony Iannotta Petrella

Sequential listing emphasizes story topics. Deep indenting allows folios to stand out (even in very light type). Picture freeze decorates top of page.

The Earth Diary

GEO

Page 8 Cave Exploration

Page 18 Cave Of Hands

Page 22 Cave Report

Page 30 Cave Report

Page 40 Cave Explores on Foot

Page 50 Cave Report

Page 60 Cave Wildlife

Page 70 Cave Exploration

Page 80 Cave Diving

Page 90 Cave Geology

Page 100 Cave Exploration

Page 110 Cave Archeology

Geo, Susanne Walsh

Sequential story listing placed on page surrounding one large photo. Unusually generous margins help communicate the expansive touch.

NEXT

COVER FEATURE
38 LIVING LONGER
By Richard Cornell

FEATURES
18 WANDERLUST IN YOUR FUTURE? THEN CHECK OUT THE CITIES
By Warren Sansson

66 THE FIRST ANNUAL NEXT MAGAZINE FUTURE EVENTS CONTEST
By Tom Lee

30 YOU CAN RUN, BUT YOU CAN'T HIDE FROM IN-FRARED
By Peter Michelmore

72 HOW TO VACATION LIKE THE RICH PEOPLE DO
By Elizabeth Quest

33 SITS FOR SORE EYES

46 THE TEARS ARE NOT SUCH A HEAVY BURDEN

78 THE MISSISSIPPI SHORT CUT
By Wendell Rawls Jr.

56 WILL TOXIC MESSES EVER BE CLEANED UP?
By Michael Brown

52 FAMOUS FACES, TODAY AND TOMORROW

DEPARTMENTS

COLUMNS

NEXT, Lester Goodman

Grouping of cover stories, features, departments, and columns. Strong contrast of color in the typography has hard-hitting character.

Mechanix Illustrated, Andrew Steigmeier

Four areas of interest defined clearly, each in its own column. Ancillary material scattered on rest of page in unrelated patterning.

Cincinnati

Two degrees of importance implied: features in the upper box, everything else in the lower box. Pictures overlap from column to column in unexpected ways.

Le Nouveau Photocinema, Henry Chauchepratt

Arbitrary, geometrical breakup of space into 12 square modules allows organization of subjects by categories (more or less) with pictorial infill.

Los Angeles, William Determe

20% screen of black over whole page except central panel emphasizes features. Department list conveniently balanced between front and back.

Three-column makeup

New York, Roger Black

The feeling of fulness, muchness, solid packing, value-for-the-money is achieved perhaps at the expense of easy reference

Inc, Paul Schaffrath

Concentrating all the odds-and-ends in the gutter column allows placing features (in larger type) in most visible (i.e. outside) two columns.

LOOK
COVER
Sally Field, Los Angeles, June 1979 by Richard Avedon
LOOK LETTERS
4 Correspondence from our readers
THRILLER
8 Death In A Fur Place
The true, suspenseful story of a handsome thief-turned murderer.
by Thomas Thompson
FACES & PLACES
24 Paul Newman & Jacqueline Bisset
26 Rickie Lee Jones
27 Linda Manz
28 "Saturday Night Live"
29 Tony Danza
30 Cattie Annie & Little Britches
31 Philip Anglim & Carole Shelley
BOOKS
33 A Conversation With William Styron
The author of Sophie's Choice talks about writing and Auschwitz.
by Peter H. Stone
39 Sally Field
After surviving the jokes, the bad parts, and consuming self-doubt, the star of Norma Rae is finally respected as an important actress.
AUGUST 1979 Volume 2, Number 2
by Elizabeth Kaye; photographs by Richard Avedon and Guy Webster
POLITICS
50 The Man Who Would Be President
Jerry Brown's elusive "something for everyone" politics are still undefined.
by Robert Scheer; photograph by Annie Leibovitz
CAMERA/CINEMA
54 Apocalypse Soon
Stunning scenes from Francis Coppola's Vietnam epic.
photographs by Chas Gerretsen and Mary Ellen Mark
SPORTS
60 All-Star Cosmos
The New York superteam may make soccer the next sports craze.
by Dave Marsh; photographs by Annie Leibovitz
ROCK 'N' ROLL
66 American Doobies
The new Doobie Brothers change image, personnel, and audience.
by David Sheff; photographs by Herb Ritts and Roger Ressmeyer
MOVIE STARS
70 The Bottom Family
When Timothy, Joseph, Sam, and Benjamin Bottoms get together, "it's like a celebration," says mother Betty.
by Gregg Kilday; photographs by Herb Ritts
ON SCREEN
76 Buy In The Bubble
Two years ago, doctors gave up; today, a six year old survives his allergy to fresh air in a portable helmet.
photographs by Diane Kean Gentry
THEATER
82 Thousand Islands
Perfect weather and idyllic seclusion on the East Coast
Photographs by Mark Jury
FASHION
90 Florucci—"Give me the world and I'll dress it."
Freak-chic fun wouldn't be seen without their snake-skin wedgies, pink cellophane raincoats, or twitching-mouth buckle belts.
by Mara Wolynski; photographs by Barry McKinley
MISCELLANY
96 John Wayne

Look, Regis Pagniez

sequential flow emphasized by rules bleeding top and bottom. Running page in white on black sacrifices legibility for visibility.

Keynote, Edward Spong

The luxury of enough space: a relaxed arrangement whose structure shows through the surface irregularity.

Folio, Steve Phillips

Pictures placed in central column, cross-referenced by page number to articles listed in flanking columns.

Adventure Travel, Call-Segerstrom; Dugald Stermer

The picture column dominates the page because of its extra-wide proportion – emphasizing the importance of graphics in this publication.

North Shore, Isai Jo

Placing people-pictures in the outside, far-right column relieves the image of the page at first glance.

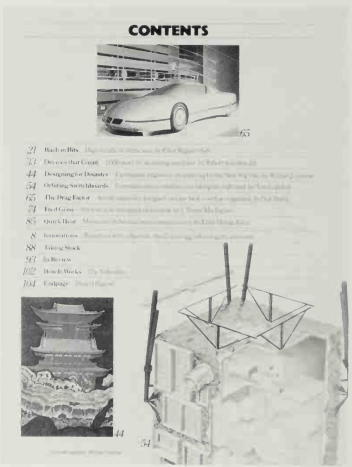
Discover, Leonard Wolfe

The arbitrary placement of story titles in three columns of irregular length is anchored by the strong frieze of pictures across the top.

AVENUE
FEBRUARY / AVENUE Calendar 6
FOOD / Jean Vallée Michael Demarest 20
HOUSE / Rambling Wreck William G. Shepherd Jr. 24
THE ARTS / Chinese Porcelain John Loring 40
FASHION / Les Bicolores Barbara Goswell 44
NEIGHBORHOOD / The Arts-Minority Hill Market Elizabeth Ames 48
STYLE / Stephen Sprouse Gordon F. Sander 52
BOOKS / New Releases Rodney Peffer 56
TRAVEL / At Your Service Myra Waldo 61
ON THE AVENUE / Rodney Theodore Macdonald Peter Gambaccini 61
SHOPPING / Light Christopher Whitcomb 68

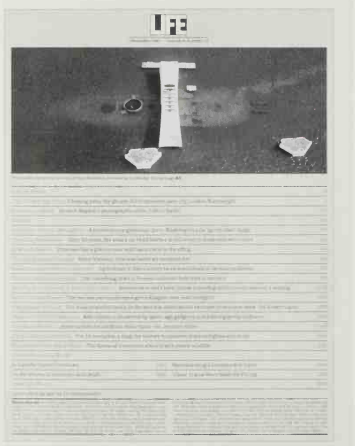
Avenue, Bob Cuino

Another example of the luxury of ample space: formal, clean, uncluttered, easily scanned listing, with a minimum of verbiage. Lines defined with rules.



Technology Illustrated, Peter Hudson

Folio/topic/description/byline — the pattern in each feature listing creates informal tabulation. Rules define full page width, overlap picture.



Life, Bob Cuino

Topic/description/byline/folio flush right, all in color on colored background. Space above type devoted to ingenious handling of pictures.

contents
Alexander Marshack The Art and Symbols of Ice Age Man 32
Jerome S. Bruner Learning the Mother Tongue 42
Allen Johnson In Search of the Affluent Society 50
Stanton Peele Addiction: The Analgesic Experience 61
Sir Walter Perry ESSAY: How to Save the Educational System 68
Bruce C. Paton Who Needs Coronary Bypass Surgery? 76
Easter W. Brown Why Meat Will Cost More and More and More... 84
Letter from the Director 4
Letters 6
News and Comment 10
Books 16
The Practical Cognizer 86
Second Look 88
Reverberations 92

Human Nature, Ira Silberlicht

Apparently a 1/3, 1/3, 1/3 page breakup thus qualifies for a 1-column place because of its handling of first lines: byline/title/description start/folio.

Two-column makeup?

Camera Arts, Thomas Rudinger

Determine the width of the two columns by means of the horizontal rules allows the type to be set ragged right, and even accepts the amusing interruption in the center

L'Express, Pascale Lemillion

Left-hand half contains full listing, right-hand half picks out three stories for emphasis. Departments are bunched up under "ET AUSSI" — and also.

Audubon, Daniel J. McClain

Right-hand half is devoted to listing of contents, the left to miniature cover picture, masthead, indicia etc. Whole page is boxed

prime time
A NICE LITTLE BUSINESS IN THE COUNTRY 27
ARNOLD PALMER INCORPORATED 34
YOU ARE WHAT YOU DO 42
WHERE CREOLE IS KING 53
LIVING LIKE A MAHARAJAH 63
MASTER OF THE EGO-BUILDING PORTRAIT 68
A LIFESTYLE FOR TOMORROW 76
CLOSET CONSULTANTS 86
INSIDE PRIME TIME 5
LETTERS 6
HEALTH: BYPASSING BYPASS SURGERY 8
FINANCE: LIFE INSURANCE OPTIONS 14
EDUCATION: IN ONE EAR 20
CROSSWORD: FROM TOLSTOY TO TWAIN 92
GAME: LAST BUT NOT LEAST 93
BOOK REMARKS 94
REFLECTIONS: ENDANGERED GRANDPARENTS 98
IN HER PRIME: JUNE HAVOC 100

Prime Time, Judy Fendelman

Stretching definition of 2-column makeup a bit: 1/3 pictures, 2/3 listing set wide. Features at top, departments below.

Channels, Dean Morris

Two rows of five stories across in an appropriate storyboard pattern: picture/folio/title/byline/description all reg. right, vertical rule at left.

Time, Rudolph Hoglund

Six columns across. Three stories picked out for emphasis with pictures. Tiny type, yet eminently legible — and worth reading.

Exxon Maxine, William Snyder

With only a few items to list, elegantly restrained typography contrasts with empty area to yield drama. Background in pale ocean-hue.

L'Expansion, Jean Pierre Montagne

Upper box, divided into columns of varying widths, contains descriptions of five stories. Titles repeated in full listing below.

Attenzione, Paul Hardy

At first glance flamboyant this is a conservative, functionally organized scheme: masthead at far left and contents at right are as simple as can be. Picture areas (and huge folios) are handled courageously indeed!

Crops Quarterly, Gordy Wilkinson

This scheme, too, plays off simple text against imaginatively handled graphics: vast space separates editorial message from the four columns of listings and picture area. Note the liveliness that partial silhouetting can impart.

114 Profitability Goes Through a Ceiling

121 How GE Manages Inflation

127 Job-Hopping Is the Top

133 C.E.O.s Pick the Best C.E.O.s

140 A Peacemaker Comes to RCA

156 The Administration's Split on Auto Imports

171 A Small Surprise from Cadillac

176 Now Targeting for Executive Pay

188 Houses for Sale: $1.5 Million and Up

201 Gamma Rays Have a Glowing Future

211 No Easy Choices in El Salvador

234 A Simpler Path to a Cleaner Environment

256 France Flaunts New Economic Muscle

274 Renault Takes Its Hit Show on the Road

287 The Reaganites vs. the Fed

308 The Race to Feed Cable TV's Maw

322 FORTUNE's Directory of the 500 Largest Industrial Corporations and the 300 Best and Worst Among the 500 Nonindustrial Industrial Corporations

FORTUNE

6 THE EDITORS DESK

41 FORTUNE FORECAST

47 IN THE NEWS

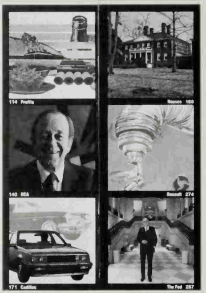
59 BED AND BOARD

105 KEEPING UP

351 PERSONAL INVESTING

357 A DIFFERENCE OF OPINION

366 LETTERS TO FORTUNE



Fortune, Ronald N. Campbell

Clear, sequential presentation with departments at left, newsy, and features at right, wider. Special items picked out in red ink. The pictures placed straddling the gutter, where they are visible when the book is fully opened — their function is more decorative than essential.

In diesem Heft

Sparplan.

Krise.

Billigflüge.

Der besondere Rat

Wohin Christbaumschmuck bringen

Modellbahnanlage für Einsteiger in Tirolerhaus

Bademäntel und Gardinen

Königlich Arktischer Nachtisch

Jetzt Steuern sparen

Alle Tips, die es zu Anfang gibt

Steuerfrei für Angestellte

Für Selbständige

Für Hausbesitzer

Für Geldanleger

Übrige

So können Sie Steuern sparen

Haus und Haustat besser versichern

Jedes Jahr mehr versichern

Die richtige Versicherung für Ihr Haus

Für Hausrat und Wertsachen

Prüfen Sie Ihre Hausapotheke

Wenn Ihnen Heute Aktienanleihen

Was Sie in Schadenfällen tun müssen

Geld

Manfred Schumacher: Optimist

Neue Inland

Mehrwertsteuer

Börse Aachener, New York

Kurse der Aktien in Frankfurt

Frankfurt, Amsterdam

DM-Banknotenkurse, Aktienkurse

Index Kosmetik über die Kompatibilität des Dollar

Tips & Meldungen

Die Risiken in Kapitalfonds-Zahlungsberichte

Die Börsenaufsicht Australien

Welcher Anleger hat der DM-Schein gegenwärtigen

Wie die gesetzlichen Krankenversicherungen arbeiten

Beruf

Karriere Börse

Bauern-Bücherei: Lesen in Gemeinschaft

Weltmeisterschaften Segelflugzeugbau in Lüdenscheid

Wenn Arbeitnehmer Vermögenswirksame Leistungen bekommen

Hausbesuch: EDV Beratungsstelle

Wie US-Manager die Bürokratie bewältigen

Gehaltsvergleich: Entwicklung Entwicklung

Wirtschaft

MEG-Entwicklung

Wie Gesellschafter Bilanzen neue Kapitel

Abschreibungsgesellschaften Abschreibungsarten

Finanzamt

Weltmarkt

Die deutsche Mineralölwirtschaft und russischen

Bundesbahn

Stark Verarbeitung Kunststoffverarbeitung

Königlich Wohngebäude

Warum Wohnungsgesellschaften nicht bauen

Die neue Anzeige der Volks-Bank

Bedingte Fonds

Kurz Aufstellung über die Arten der Mietwohnungen

Mietwohnungen

Hier Anleihen zur Privatgruppe

Paul de Hollenbach

Bauingenieure ordnet Kapitel

Der große Markt in der Wirtschaft Frankfurt

Welche Unterschriften sie zur Ausweis

Unsere Gründe

Politik

Kommunale Bundestag 1984

Hans Matthöfer: Selbstverständnis

Wie viele EG-Gegenstände [illegible]

[illegible]

Kredit Steuerbegünstigte Fonds [illegible]

Bundesbahn Kapitalanlagen

Politiker: Kauf über Kleinbetriebe

Kredit Politik

Gesellschaft

Verkaufsgesellschaft [illegible]

Wie die Kosten der Kredite [illegible]

Der Deutschlandsender Fernsehen [illegible]

Kredite und Computer

Der Fall der Berliner Mauer [illegible]

Was sagt Ihnen [illegible]

Guide Capital

Finanz Kapital

Kleinanlage

Info Mode

Kredit Mehr Werke

Kapitel Bilanzen Kredit

Bücher

Mallorca

Kapitel

Kultur

Rubriken

Kommunalpolitik

Impressum

Wichtige Hotels Fremdenverkehr Landwirtschaft

Ab 18 Gemeinde Bücherei Kapitel

Hauptthema Heft

Reiten.

Vorbild.

Modellverträge.

Unter-versichert.

Bürokratie.

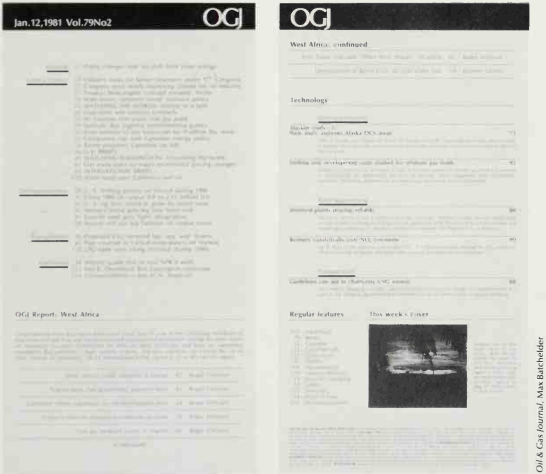
Wartezeit.

Capital, Jurgen Kryszons

complex contents presented tabulated by topics in two central columns (Special Advice, Money, Careers, Economy etc). Outer halves of pages devoted to informal stories about stories, some cute pictures and even captions. Tan background with red display helps hold it all together.

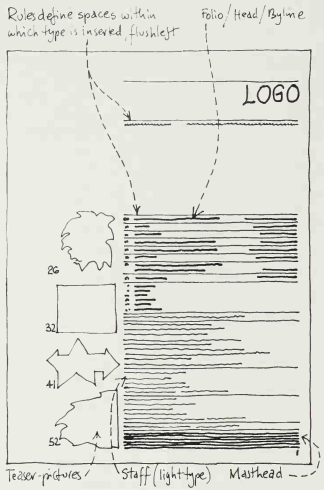
Eastern Review, John Van Hammersveld

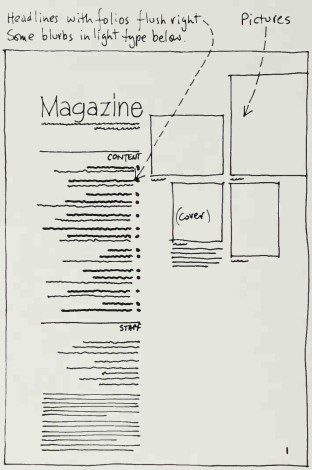
Cheerful, colorful atmosphere to divert in-flight passengers. Effect of delightful miscellaneous bits and pieces is created by the narrow-column makeup, strong color contrast in type, apparently random insertion of pictures. "Preview, Review, Overview" headings are hardly visible – but that doesn't detract from success of presentation.

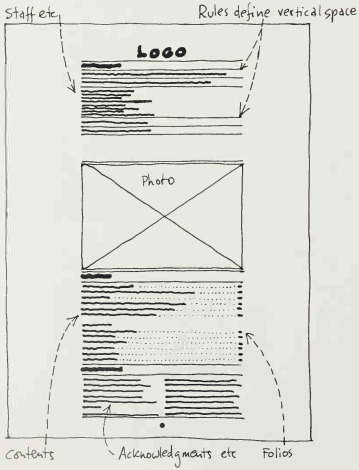


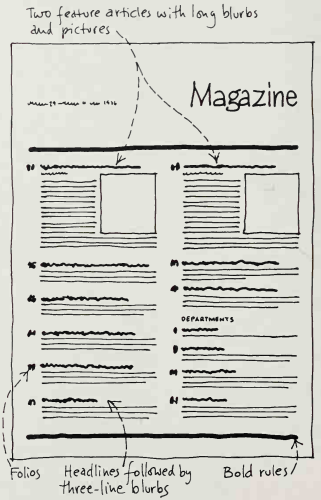
Oil & Gas Journal, Max Batchelder

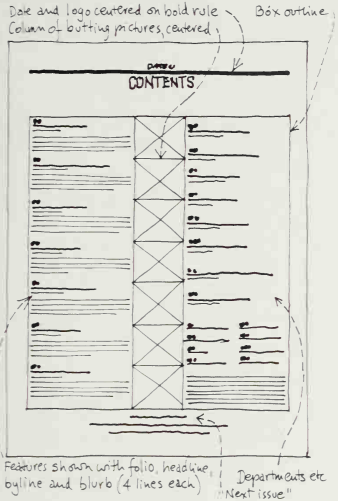
Both sides of heavy stock card tipped in following inside front cover. Extremely complicated publication requires detailed grouping of full spectrum of contents for specialized readership.

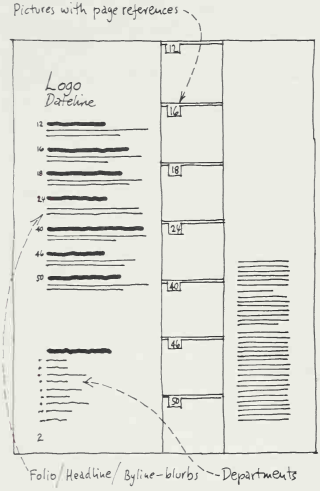

Rules define spaces within which type is inserted flush left
Folio / Head / Byline
LOGO
26
32
41
52
Teaser pictures
Staff (light type)
Masthead


Headlines with folios flush right
Some blurbs in light type below
Pictures
Magazine
CONTENT
(cover)
STAFF
1


Staff etc
Rules define vertical space
LOGO
Photo
Contents
Acknowledgments etc
Folios

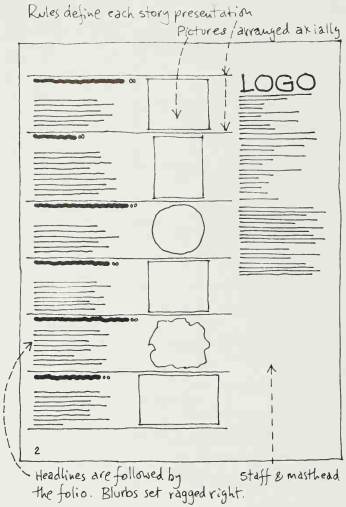

Two feature articles with long blurbs and pictures
Magazine
DEPARTMENTS
Folios
Headlines followed by three-line blurbs
Bold rules

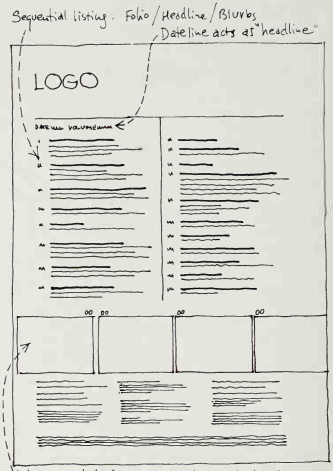

Date and logo centered on bold rule
Column of butting pictures, centered
Box outline
CONTENTS
Features shown with folio, headline, byline and blurb (4 lines each)
Departments etc
"Next issue"

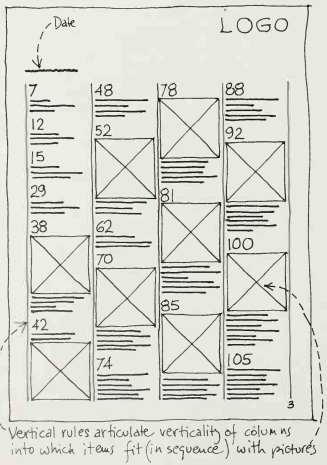

Pictures with page references
Logo
Dateline
Folio/Headline/Byline-blurbs
Departments

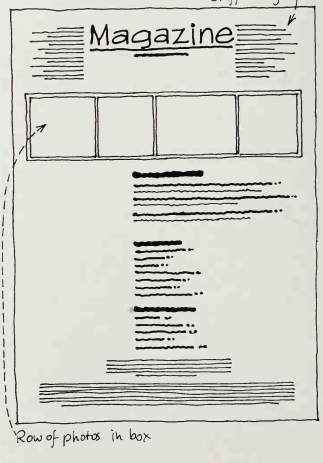
LOGO
Date
Headlines with folios
Bylines with blurbs below
Staff
Masthead

Interest-area of magazine
Dateline
LOGO
Photos between vertical rules
Staff & masthead

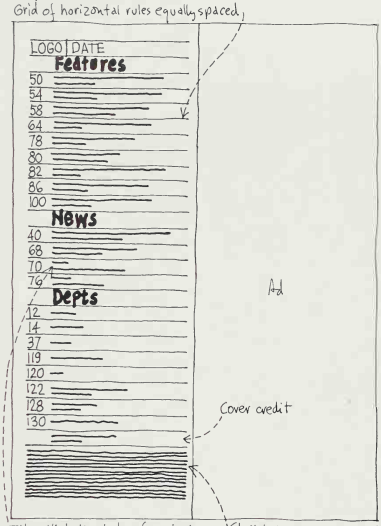

Rules define each story presentation
Pictures / arranged axially
LOGO
2
Headlines are followed by the folio. Blurbs set ragged right.
Staff & masthead

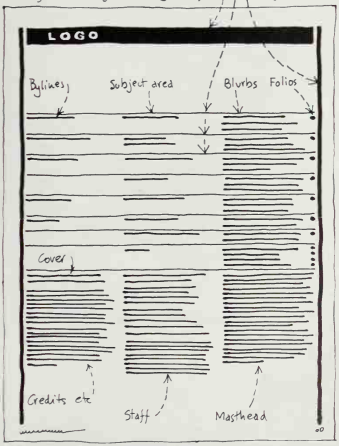

Sequential listing - Folio / Headline / Blurbs
Dateline acts as "headline"
LOGO
Attractive photo frieze separates contents above from staff lists etc. below

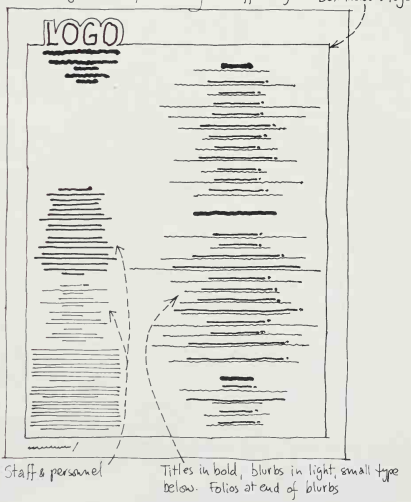

Date
LOGO
7
12
15
29
38
42
48
52
62
70
74
78
81
85
88
92
100
105
3
Vertical rules articulate verticality of columns into which items fit (in sequence) with pictures


Staff listings
Magazine
Row of photos in box

Byline/Folio/Headline pattern followed throughout
Bold and light rules organize space. Bold and light type indicates importance
LOGO


Grid of horizontal rules equally spaced
LOGO | DATE
Features
50
54
58
64
78
80
82
86
100
News
40
68
70
76
Depts
12
14
37
119
120
122
128
130
Ad
Cover credit
Title with byline below for each story
Staff listing


Strong modular geometric grid of various-weight lines
LOGO
Bylines
Subject area
Blurbs
Folios
Cover
Credits etc
Staff
Masthead
All material clearly organized in groups


Box includes logo
LOGO
Staff & personnel
Titles in bold, blurbs in light, small type below. Folios at end of blurbs

FLASH! STOP PRESS! URGENT!

FLASH FORMS

Many publications have a "flash form" — a four- or eight-page sheet that goes to press at the very last moment (i.e., it "closes late" — that's why it is called the "late-closing" form). It is bound into the magazine as the last step in production; it can therefore carry the latest stop-press news. Of course such news can't possibly be as up-to-the-minute as that in today's newspaper, since production and distribution of the periodical takes time. However, it is generally accepted that such a group of late-closing pages is a positive attribute of specialized publications and, as such, deserves to be handled wisely and subtly, in order to bring out its maximum potential. (!!)

Many publications do not have a true late-closing form, but nevertheless, recognizing its sales and public relations value, they ape the real thing by plagiarizing the design techniques that the honest ones use. The sham becomes transparent once the page is read, but the fact that pages which have the look of flash forms are there seems to add extra value to the publication.

Whether the flash form pages are honest or sham is, alas, immaterial as far as page design goes. The effectiveness of graphic image is not affected by the freshness or the staleness of the content — so here are some of the elements often used, which combine to give the required look. How they are combined, how the subtlety of proportion and spacing and typographic "color" are handled can make all the difference between a page that looks fresh and interesting and a page that is obviously a rip-off, a cliché, a pastiche of all the other "News from Washington" pages the editors have seen over the past years.

What are the basic elements?

1. Color of stock. If the late-closing form is, indeed, a true late-closer, it is often economically possible to print on a paper of different color and texture from the rest of the publication. Here is the prime method of calling attention to this section of the magazine, since it looks different (it can even be seen at the edge of the closed issue) and feels different (rougher, softer) than the surrounding stock. Usually it is a yellow or buff-colored paper

since this seems to be visible yet restrained enough to appear obviously "editorial" (with the commensurate dignity required) and thus cannot be mistaken for an advertising insert which is likely to be colored more flamboyantly. Other commonly used colors are pale blue, pale orange, pale green, and sometimes, though not too often, thank goodness, pale pink. In any case the color is likely to be pale, because the paleness ensures that the black type printed on it will be easily legible; the contrast between the ink and the paper color are crucial.

What do the quasi-late-closers do? To help their pretense of having a make-believe insert, they use cans and cans of ink to print a second color full-bleed over the page. (The hue is normally brighter, more unsubtle, cruder than actual colored paper.) This coating of colored ink may actually create the illusion of a second stock — assuming that both sides of the page get the full treatment. But this seldom happens because the way the pages are laid out for printing prior to folding and trimming makes coloring both sides of a page impractical. The advertisers get preference, obviously, which is only right, since they are footing the bills. So you often find an "insert" that *appears* to be an insert all right, until you turn the page and discover that the emperor has no clothes: one side of the paper is colored, but the other side is not, and so the illusion is shattered. Nevertheless, whether the ink is printed on one side or both, the tactile and textural difference between the two paper stocks is nonexistent — although the color-inked side probably will be somewhat more slimy and shiny than the neighboring pages, because of all that glossy ink. So the trick seldom, if ever, works the way the editors hope it will.

2. *The logo.* There must be some sort of department heading that links the flash form to the other departments clearly, making it into an element in a chain of elements, albeit a most important one. Usually the slug reads "Washington," since most industry and professional news of political consequence or indicating future trends emanates from there. However, there are publications which merely call this page "Late News" and yet others who invent their

own label usually based on a pun or inside joke of some sort, such as *Chemical Engineering*'s "Chementator" or *Modern Plastics*' "Plastiscope." Whatever the wording, the typography must be of-a-piece with the rest of the department headings.

3. *The date.* This information is often run in conjunction with the logo, to reinforce further the impression that this page is a newsletter being sent to the recipient as a sort of bonus bound into the magazine.

4. *The writer's name and/or picture.* If the report is written by a special writer retained by the publication to inform the readers of the inside scoops, then his name rightfully belongs on the page, not merely because he probably deserves the byline, but because his very presence brings credit to the publication. Sometimes, the name of the editor is used if he is known and respected by the readership and can thus add a degree of lustre (or credibility) to the information.

5. *The typography.* There are three schools of thought here — each has its adherents, each its detractors and drawbacks. Examples of each can be found on the pages that follow.

   (a) Large-type, wide-measure, heavy-handed school, that trumpets its items few to the page, possibly using some boldface lead-ins for emphasis
   (b) Normal-type, normal-measure school, which relies on headlines to do its trumpeting (and there are lots of headlines per page)
   (c) Typewriter-type school, that carries the newsletter-bound-into-the-issue illusion to its ultimate graphic conclusion

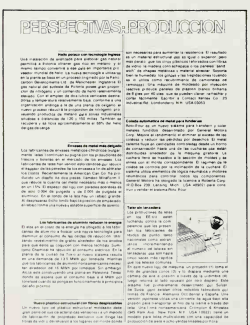
   The choice of type is further complicated by the problem of headlines. This is, obviously, not just a design consideration, but must be integral with the thinking of the editors and the way the items are written.

   Thus school (a) can eschew the use of boldface lead-ins and substitute headlines in some way: either stacked in the left-hand margin, or run as single-liners, poking out into the left-hand margin. Or it can compromise and run boldface lead-ins as outriggers in the left-hand margin.

School (b) can stack headlines, run them as outriggers, span two columns, three columns, or whatever; the danger here is that the more "normal" the page arrangement, the less "special" it is, losing some of its importance in the process.

School (c) has a problem with headlines since typewriter type comes in one size only. As soon as different sizes are combined, the illusion of that typewritten letter is weakened (even though people are becoming accustomed to copy from typewriters with interchangeable typefaces). The entire illusion, however, goes out the window when real boldface typset type is thrown in to make the headlines bolder. If typewriter type must be used, then its limitations must be accepted and a design format devised that will overcome them (see page 83).

6. *Decorative elements* (such as rules and borders, etc.). The same principles apply here as in other situations where extraneous graphic material is brought into play: there is no reason why decorative elements should not be used, as long as they are used with a specific purpose in mind. Decoration, in itself, is a perfectly acceptable purpose, but when coupled with another good reason, the likelihood is that the solution will make good sense and create graphic character with impact and serious value.


PERSPECTIVAS: PRODUCCION

What are such good reasons? Creation of "color," for instance, by making contrast between very thin elements and very black elements, such "color" adds a liveliness to the page that it would lack if it were in plain type. Or creating a "box" that individualizes this page from all the others, thereby giving it its aura of extra importance. Or running two hairline rules up the page, bleeding top and bottom, creating a tall, thin channel, within which the material is placed — not terribly useful on a single page, but extremely useful on a multipage insert where the vertical rules act as railroad tracks from page to page, linking the pages together with minimal bumps. Or placing "masts" up the center of the page from which to suspend the items on either side. Or running color rules between items, both to split them up, as well as to create a "net" within which the items are disposed. Or for one of the purposes suggested by the examples on the next few pages.

Short items: the essence of the material

It doesn't matter how the items are arranged on the page, as long as this one crucial feature comes across immediately: each item is short. This is not merely a characteristic of the material to be played up in order to make the most of it visually, but is also a useful reader-attractor since short items always receive the most attention. (It looks as though it is no work to go through a group of little snippets, whereas a page of solid gray type would seem much more threatening drudgery.)

This example from *Electrical Construction and Maintenance* is about as simple a presentation as can be devised: separation is achieved by means of rules between the items; boldface lead-ins are used in lieu of headlines; there is lots of white space to make the page stand out — yet it remains part of a continuum by virtue of the logo which is reminiscent in design of all other department headings.

WASHINGTON REPORT

Signs that inflation is in fact here and increasing are beginning to multiply, and pressure for stronger economic measures to combat it is building up, both within government and out. Business economists and financial experts, and some government economists, agree that the time is already past when the Administration should take decisive action to curb this inflation before it gets out of hand. The big question is what action to take to provide the needed restraint to the economy, and relieve some of the pressures which are contributing to inflation.

Late last month, President Johnson reaffirmed that he did not want to push for an anti-inflationary tax increase prematurely, and cited a number of economic trends that are having some dampening effect on the economy. These included tax actions already adopted, a slowdown of the money supply and growth of business loans, and a 17% drop in housing starts in February.

Spending for new plant and equipment will rise $8 billion to $60 billion this year, according to the latest quarterly survey conducted by Dept. of Commerce—Securities & Exchange Commission. This forecast is generally causing concern among officials, who fear it could overextend the construction and equipment industries, adding to inflationary pressures. In 1965's final quarter, capital-investment spending was at a $55,350 million annual rate, and 1966's first quarter was expected to total $57,290 million. The average annual rate predicted for the second half of this year is $62,200 million.

An additional 200,000 tons of copper was released from the Federal stockpile late last month by President Johnson, chiefly to meet mounting need for the metal in the Vietnam war. This action was also expected to dampen pressure for a copper price increase.

A pay raise for Federal employees of exactly 3.2% was proposed by President Johnson early in March. This conforms to the Administration's wage guideline for labor and industry. Federal employee's pay has increased by more than 16% since 1961.

Estimates for 1966 gross national product (GNP) keep climbing as business activity keeps accelerating and defense spending, with its multiplier effect on the rest of the economy, keeps going up. Forecasts now range from $724 billion to $735 billion, versus earlier forecasts of $720 to $725 billion.

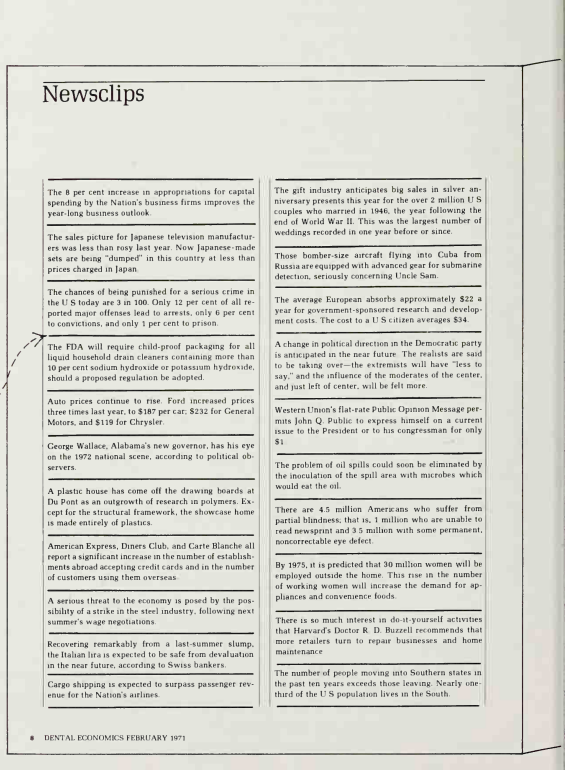
Unemployment in February dropped to 3.7% of the total labor force, the lowest rate since 1953. The rate was down to 2.6% during the Korean War.

Industrial output rose to a record during February, when it was 151.3% of the 1957-59 average. A year earlier it was 139.2%. During the same month personal income jumped $4 billion, at a seasonally adjusted annual rate, to a record $556.3 billion.

9

Two-columns-per-page organization

In this page from *Dental Economics* the individual items are kept within a maximum of five and minimum of three lines apiece; with this basic visual definition of the raw material, it is possible to devise a page arrangement that will make the staccato rhythm come across unequivocally, giving the page its individuality. Here the heavy, horizontal rules are run in color, helping dress up the page even further. (See page 182 for another example of a department from this publication and compare the differences and similarities of graphic treatment of the two sets of materials.)



Newsclips

The 8 per cent increase in appropriations for capital spending by the Nation's business firms improves the year-long business outlook.

The sales picture for Japanese television manufacturers was less than rosy last year. Now Japanese-made sets are being "dumped" in this country at less than prices charged in Japan.

The chances of being punished for a serious crime in the U S today are 3 in 100. Only 12 per cent of all reported major offenses lead to arrests, only 6 per cent to convictions, and only 1 per cent to prison.

The FDA will require child-proof packaging for all liquid household drain cleaners containing more than 10 per cent sodium hydroxide or potassium hydroxide, should a proposed regulation be adopted.

Auto prices continue to rise. Ford increased prices three times last year, to $187 per car; $232 for General Motors, and $119 for Chrysler.

George Wallace, Alabama's new governor, has his eye on the 1972 national scene, according to political observers.

A plastic house has come off the drawing boards at Du Pont as an outgrowth of research in polymers. Except for the structural framework, the showcase home is made entirely of plastics.

American Express, Diners Club, and Carte Blanche all report a significant increase in the number of establishments abroad accepting credit cards and in the number of customers using them overseas.

A serious threat to the economy is posed by the possibility of a strike in the steel industry, following next summer's wage negotiations.

Recovering remarkably from a last-summer slump, the Italian lira is expected to be safe from devaluation in the near future, according to Swiss bankers.

Cargo shipping is expected to surpass passenger revenue for the Nation's airlines.

The gift industry anticipates big sales in silver anniversary presents this year for the over 2 million U S couples who married in 1946, the year following the end of World War II. This was the largest number of weddings recorded in one year before or since.

Those bomber-size aircraft flying into Cuba from Russia are equipped with advanced gear for submarine detection, seriously concerning Uncle Sam.

The average European absorbs approximately $22 a year for government-sponsored research and development costs. The cost to a U S citizen averages $34.

A change in political direction in the Democratic party is anticipated in the near future. The realists are said to be taking over—the extremists will have "less to say," and the influence of the moderates of the center, and just left of center, will be felt more.

Western Union's flat-rate Public Opinion Message permits John Q. Public to express himself on a current issue to the President or to his congressman for only $1.

The problem of oil spills could soon be eliminated by the inoculation of the spill area with microbes which would eat the oil.

There are 4.5 million Americans who suffer from partial blindness; that is, 1 million who are unable to read newsprint and 3.5 million with some permanent, noncorrectable eye defect.

By 1975, it is predicted that 30 million women will be employed outside the home. This rise in the number of working women will increase the demand for appliances and convenience foods.

There is so much interest in do-it-yourself activities that Harvard's Doctor R. D. Buzzell recommends that more retailers turn to repair businesses and home maintenance.

The number of people moving into Southern states in the past ten years exceeds those leaving. Nearly one-third of the U S population lives in the South.

8 DENTAL ECONOMICS FEBRUARY 1971

rules in color

...or a single, extra-wide column organization

This is the important first page of a multipage news section. As such it must carry the major news stories as well as act as "opener." The extra wide setting (highly uncharacteristic of the magazine as a whole) and the geometrically simple page arrangement (which is, indeed, quite characteristic of it) meet both these requirements. The boldface lead-ins to the items ought to be restricted to one line only, and, to help legibility as well as continue the shortness-of-items principle, the items ought not to exceed five lines apiece. The variety produced on the page by the different item lengths is a positive factor — as variety — but one wonders whether a couple more short items culled from the long ones, might not make the page even more successful.

NEWS IN BRIEF

THE RECORD REPORTS

NEWS REPORTS
BUILDINGS IN THE NEWS
HUMAN SETTLEMENTS
REQUIRED READING

A bill now in Congress would allow a construction union to shut down an entire construction site. It passed HR 5900 will permit a union to force a general contractor off the project by picketing everyone on the site even if he is not involved in the disagreement. The bill, known as the Common Situs, would abolish the existing rule that allows a craft/site bent union to strike and picket a firm in dispute, but not to willfully picket or to pressure any firm on the site that is neutral in the dispute. The change would enable any of the building trade unions having a dispute with one of several firms on the site to picket indiscriminately, and to shut down the entire project. Details on page 34

The U.S. Supreme Court has agreed to review Federal court authority to countermand state licensing rules for design professionals. The case in point involves a three judge constitutional court in Puerto Rico which struck down a provision that only citizens can get full licenses from examining boards of architects, engineers and surveyors. The high court will look at the legality of banning alien architects. The lower court order to the board to license Mexican and Spanish applicants is stayed until the justices rule in the term beginning October 6.

Candidates are now being considered for the AIA/NBS Architect in Residence Program sponsored by the American Institute of Architects and the U.S. Department of Commerce's National Bureau of Standards. Among the goals of the program is maintaining linkages between the architectural profession and research and development in planning and construction technology. The appointment offers a stipend of $13,000 and runs from September 1, 1975 to June 30, 1976. For further information contact: John P. Eberhard, AIA Research Corporation, 1735 New York Avenue, N.W. Washington, D.C. 20006

Wage settlements in the construction industry are averaging 10.1 per cent so far this year, up from 9.6 as reported in April. These figures are compiled by the Associated General Contractors of America and reflect 153 settlements reported to its national office. Approximately 3,500 contracts expire this year.

Bankers are now wary of PUD costs, according to a Business Week interview with mortgager Robert L. Cashion, board chairman of North Carolina National Bank. He states: "The amount of development capital required the amount of risk exposure generated is just too much for any one leader or consortium of lenders to accept."

Owens-Corning Fiberglas Corporation announces its Fourth Annual Energy Conservation Awards Program. The program recognizes architects, engineers and building owners who have made significant contributions to energy management in the design and construction of commercial, industrial and institutional buildings. Deadline for submitting entries is August 31. For further information write Owens-Corning Fiberglas Corporation, Fiberglas Tower, Toledo, Ohio 43659.

Joseph A. D'Amelio of Sweet's, and Saul Horowitz Jr. of HRH Construction Company died on June 24 in the crash of an Eastern Airlines jet landing at New York's John F. Kennedy International Airport. Both men were returning from the annual convention of the Construction Specifications Institute in New Orleans. Mr. D'Amelio, a registered architect was vice president of development for the Sweet's Division of McGraw-Hill Information Systems Company, and had previously been an assistant professor of architecture at Cooper Union in New York. Before joining McGraw-Hill, he was also a designer in the New York offices of Skidmore, Owings and Merrill, Gruzen and Associates, and Edward Durell Stone. Saul Horowitz Jr., chairman of the HRH Construction Company, one of the largest privately owned building contractors in New York, was also the current president of The Associated General Contractors of America. Last year, he was named "Construction Man of the Year" by *Engineering News-Record*, and among the buildings constructed by his firm are the Whitney Museum of American Art and the Waterside housing development in New York City.

Columbia University is seeking films and video-tapes dealing with built environments for a film festival to be held in November. This year's festival focuses on the urban realm, and on process of urbanization. A jury of prominent urban specialists will award monies prizes to those works selected, and all entries must be received between September 15 and October 1st. Deadline for indicating interest is July 31st. For more information contact Francisco Cortino, 410 Avery Hall, Columbia University, New York, New York 10027.

John Merrill Sr., retired partner in Skidmore, Owings & Merrill died June 10 at the age of 78. He lived in Colorado Springs. Mr. Merrill, who retired in 1958, was a Fellow of the American Institute of Architects and past president of the Chicago Chapter. Among his most notable achievements was the design and construction of Oak Ridge, Tenn. the nuclear-research installation where the atomic bomb was developed.

Peter Blake has been appointed chairman of the Boston Architectural Center's School of Architecture. Mr. Blake, an Infect and editor of *Architecture Plus*, will move to Boston from New York and assume his duties at the BAC later this year. The BAC is one of the oldest and largest architectural schools in the U.S., with more than 1,100 students admitted under an open-door policy, with a volunteer faculty of more than 200 professionals.

Longer items require strong headlines to entice the reader's scrutiny

The two examples shown here are similar solutions to the problem of getting the reader interested in slightly longer items. In fact, the texts are not all that long, though the large (twelve point) type makes it appear as though they were. The contents, however, are of great importance to the readership and thus warrant a stentorian tone of voice, one with obvious authority. Big type, set widely, is the most forthright visual signal of such tone, assuming that the typeface itself has the right character. Baskerville (*Engineering News-Record's* body copy face) and Century Expanded (*Construction Methods and Equipment's* face) both are dignified and strong enough to do the job.

The headlines that jut out like outriggers into the white space of the left-hand margin are highly visible and help lead the eye right into the text. They are visible because of their blackness (in spite of the fact that the type size is only twelve point) and because of the white space against which they contrast.

The outrigger boldface lead-ins in the example on the next page are better at pulling the eye into the text, since they lead directly into it; however, technical typesetting requirements dictate that the boldface headlines in both the examples here be set on separate lines.

ENR **WASHINGTON OBSERVER**

Transportation measures clear Congress in waning hours

Major legislation affecting highways, airport development and railroad construction moved through final congressional steps in the closing days of the congressional session. In a last-minute move, the House approved by a vote of 410 to 7 the federal highway aid bill (H.R. 8235), which extends the Highway Trust Fund for two years and provides an unspecified amount for the Interstate program. The measure also includes $800 million for the primary road system, $400 million for the secondary system, $800 million for the urban system and $400 million for the urban extension system. Senate-House conferees must now meet to resolve differences with the Senate's S. 2711, which has lower funding levels.

In a separate action, the House approved its aid to airport development bill (H.R. 9771) after restoring a provision for terminal improvements. Funding was set at $2.3 billion over three years. Both houses of Congress passed a $6.5-billion railroad aid bill (S.2718) that includes $2.4 billion for construction improvements in the Northeast corridor. The fate of the measure is in doubt. Transportation Secretary William T. Coleman recommends a veto, prompting congressional leaders to withhold the bill until Congress returns, to block a potential pocket veto by the President.

AGC fights expansion of small contractor surety bond program

The Small Business Administration (SBA) surety bond guarantee program for small construction contractors is coming under fire from the Associated General Contractors (AGC). The contractors' association claims that marginal firms, lacking the stability to secure bonding on the open market, are unfairly propped up by a plan under which SBA provides guarantee assistance for companies with an annual volume up to $2 million. The program encourages companies to take "unnecessary risks on jobs for which they do not have the qualifications or experience to obtain commercial bonding," AGC officials are telling congressional committees.

AGC wants Congress to make it clear to SBA that it should not have raised the volume ceiling of $750,000, which was in effect until two years ago. The agency adjusted the amount upward after determining that many general contractors with higher gross receipts were unable to obtain bonds.

Trade commission joins battle for professional advertising

The Federal Trade Commission (FTC) in separate challenges involving physicians and optometrists has joined the Justice Department in its battle against advertising bans on professional services. Commission spokesmen will not say whether similar action against construction design organizations is to be expected, but clearly all restrictions on professional advertising will be challenged by one or the other of the federal agencies.

The FTC filed complaints against the American Medical Association, charging that its policies prevent physicians from advertising and against ophthalmologists and optometrists over eyeglasses advertising. In both cases, the commission is demanding that the groups "cease taking any action which interferes with a . . . (professional's) right to advertise his services or to otherwise engage in open and free competition" with other professionals.

Export Expansion Act still alive

Don't give up hope for the Export Expansion Act. It may still become law, but probably not before next year.

The construction industry has a large stake in the bill. John E. Quinn, executive secretary of the National Constructors Assn., has said approval would mean an increase of $2 billion to $3 billion annually for the 35 companies in NCA.

The bill is complex, but two provisions are particularly important to the construction industry. One would authorize several U.S. firms to enter into cost sharing contracts with the Commerce Dept. to develop export programs in various ways, including the preparation bids on foreign projects.

Another provision would establish a Commission on Foreign Procurement Practices which would recommend federal government action to assure that bids by firms in individual foreign countries receive no more favorable treatment in the U.S. than that accorded to bids by U.S. firms in that country.

Among these provisions is one offering an antitrust exemption to U.S. firms forming a combine for bidding on foreign work. U.S. international contractors have long argued that the antitrust laws have worked at a disadvantage to them in attempting to win foreign work.

The bill (S.2754), sponsored by Sen. Warren Magnuson (D-Wash.), has now been divided into six separate pieces of legislation to get around problems of congressional jurisdiction.

In Congress' rush to get away for the summer political conventions, the measures are unlikely to move very far. Magnuson, however, is among the most powerful of Senators and as chairman of the Commerce Committee he is in a position to see to it that the issue is kept alive.

International banks may be cut

The Administration's proposal for appropriations for international banking authorities may be cut by Congress again this year.

These requests are stalled at the subcommittee level pending Congressional action on the authorization legislation for security assistance. Action on the appropriations is not likely before fall and all face substantial cuts in the House where Rep. Otto Passman (D-La.) has great influence as chairman of the Foreign Operations Subcommittee of the House Appropriations Committee. Passman is highly critical of Nixon's policy of putting more foreign aid through multilateral institutions which Passman believes dilutes the control of Congress and loses export business for U.S. companies.

Although the U.S. construction industry has complained in the past that the procurement practices of the international financial institutions are weighted against American firms, U.S. contractors still stand to get some business from the multilateral agencies. U.S. contractors and engineering firms in recent years have done quite well in bidding on projects financed by international development institutions, winning a share of the business roughly comparable to the U.S. contributions to those institutions.

Two-columns-out-of-three used as basis for design variations

The two versions of *Modern Plastics'* "Plastiscope" section show the two degrees of importance assigned to the material on the pages: the more important, stop-press material, right, is set in larger scale, using double-column width with long outrigger-type boldface lead-ins to carry the eye into the text. The department's second division, opposite, (which starts on a new page in the back of the book) carries the more mundane, less important stories; the normal column width is used, with free-standing headlines that are positioned similarly to the outriggers, but here span the full page, also covering the illustrations which are placed in the far left column.

The tone intended by the editors becomes quite evident when the two pages are compared — yet makeup is absolutely standard and simple.

NEWS AND INTERPRETATION

THE PLASTISCOPE

Plastics respond to the general business level A study of the past three 6-month periods for plastics indicates that the industry's sales pattern follows that of general industry with little modification. The once fashionable idea that because of its new markets and its successful invasion of old markets, plastics could increase while general business declined, probably can now be abandoned.

Plastics sales in the first six months of 1966 continued the upward climb that had been going on for several years in nearly all business, and contributed to the record sales set in 1966 (see table, below). But the figures show that most sales began to level off in mid-1966. They were still high compared to other years, but the rate of growth had slowed, as it had in most other industries.

The first-half sales of 1967 remained at about the same level as the second half of 1966 with a slight over-all decline, except in three or four instances to be discussed later. If this first-half figure is doubled, it may give an indication of what the total for 1967 is going to be, but most sales managers feel that the second half will exceed the first half by a small percentage.

How the major plastics stacked up at mid-year The following table contains U.S. Tariff Commission consumption figures for the first and second halves of 1966 and the first half of 1967, covering the large-volume resins. Statistics for such materials as nylon, acetal, polycarbonate, etc., are not reported by the Commission in its monthly publication. (Figures below are in thousands of pounds).

Material	*First 6 months of 1966*	*Last 6 months of 1966*	*First 6 months of 1967*
Polyethylene, low density	1,261,254	1,264,718	1,248,410
Polyethylene, high density	417,833	451,397	476,306
Polypropylene	250,628	293,639	299,680
PVC and copolymers	1,071,303	1,080,809	1,052,581
Styrenics, total	1,102,541	1,243,932	1,141,963
Molding	629,366	621,263	563,297
Extrusion	174,903	164,310	174,186
Epoxy, unmodified	71,621	66,831	64,985
Polyester	202,890	194,753	212,703
Phenolic types, total	406,690	392,441	369,156
Molding	138,040	133,354	123,497
Laminating	41,829	36,073	33,069
Urea and melamine	276,484	267,179	271,793
Laminating	16,928	15,351	16,081
Cellulosics	90,276	92,659	86,291

For the polyolefins, it's a case of "high hopes" Low density PE consumption is expected to be about the same in 1967 as in 1966, namely, 2.5 billion pounds. It could even go to 2.6 billion, but through September there was as yet no indication of the kind of big raise that would have to come to produce that volume. Film-grade resin sales, which account for almost 50% of domestic sales, were 506.3 million lb. in the first half of 1967 versus 543 million lb. in the same period of 1966. The 1967 film figure could have been influenced by a large inventory buildup in the last few months of 1966 by extruders. In 1967, the industry expects a sale of at least 2.25 billion lb., a little over 1966. The low density PE export market is not yet clear—it varies considerably from month to month, but at last count was slightly under 1966.

Of even more importance to the industry than sales volume was the price

43

NEWS OF THE INDUSTRY

THE PLASTISCOPE

German breweries introduce test beer bottles — blow molded from PVC

The long-awaited entry of polyvinyl chloride bottles into volume food markets may be beginning in Germany, with the introduction of test bottles for beer—first shown at the International Exhibition of Fine Foods, Cologne, in early October (They were also shown at the Kunststoffe show in Dusseldorf.)

The filled bottles were distributed (free) at the Exhibition by Paderborner Brauerei GmbH, Paderborn, and Stern Brauerei Carl Funke AG, Essen, both of West Germany. Spokesmen for Chemische Werke Huels, of Marl, which developed the bottles with the two breweries, says there are no chemical reaction problems in storing the beer in PVC bottles. Data on formulation of the PVC compound, including use of heat stabilizers, was not available at the time the bottles were introduced.

Another problem, that of containing a liquid that can build up gas pressure, and of maintaining flavor, is solved in the use of PVC, the chemical company says. While the Paderborner bottle is conventional in shape (see photo), the brewer reportedly has no qualms about its ability to contain the liquid. Stern-Brauerei, on the other hand, has deliberately chosen a shape that resembles two connected globes, with the cap resting on the top globe. The globe design is believed more capable of resisting the build-up of gases within the container. Another spherical beer bottle, recently patented in Germany by Helmut Lower, of Dransfeld, is said to provide four to six times the pressure resistance of cylindrical constructions, plus giving uniform wall thickness.

Horst Launer, president of Paderborner, claims that the economics of the PVC bottle favor it over glass when the brewer maintains a blow molding machine on the premises, even exclusive of gains in handling and shipping. The PVC bottles are one-third the weight of throw-away glass containers.

Resin combinations in fluidized bed coatings are tailored to the job

A wider market for fluidized bed and electrostatic coatings is foreseen with the introduction of blends of plastics and resin powders that combine the advantages of two polymers with gains in economy and performance. So far, the system has been used to successfully blend vinyl with polyethylene, epoxy, butyrate, and polyester, to blend nylon with epoxy and PE, and to combine epoxy with PE and polyester.

The blending technique was developed by B. L. Downey Co. Inc., of Vernon, Calif., and is currently being used to coat a line of silverware display racks. The system can also be adapted to lay down laminates of two or more resins; one such use is in a vinyl polyester laminate for aluminum chairs, to be used in an outdoor cafe (see photo).

Reductions in costs are claimed for the blending system, since more expensive resins may be combined with such commodity types as PVC and PE. For instance, the silverware display racks combine epoxy and PVC in a 75:25 ratio. Epoxy sells for about three times the price of PVC.

But there are processing and performance advantages from the blending system as well. For instance, in the epoxy/PVC mix, the epoxy provides good adhesion to the metal frame; vinyl alone would require a separate priming step. Also, epoxy alone would be brittle, and probably could not survive flexing of the metal rack; the vinyl adds flexibility to the coating. A third benefit comes with blending special colors into a coating that might be difficult to obtain with one resin.

The company reports that there are special techniques involved, which include the blending of compatible powders in the right proportions, and using particles of similar size. There is reportedly no problem in coring dissimilar materials, even when different melt temperatures are involved. Nylon (450° F. melt index) and PE (300° F.) have been blended and cured successfully. Experiments are under way with nylon and chlorinated polyether, and other exotic combinations.

In the process, mixed powders are suspended in a tank by about 1 lb. air pressure. At the same time, the tank is vibrated to move the particles horizontally and maintain a controlled turbulence. Metal parts to be treated are first preheated in an oven at about 600° F., and then dipped into the tank for coating. After dipping, excess particles are vibrated off the part, and it travels to the curing oven.

The largest market for standard pow-

Chementator

FEBRUARY 17, 1975

The tough new 1-ppm. ceiling for worker exposure to vinyl chloride in ambient air was upheld Jan. 31 by a three-judge panel of the U.S. Court of Appeals for the Second Circuit, in New York.

The Soc. of the Plastics Industry (SPI) and some 20 chemical and plastics firms challenged the standard after OSHA announced it last fall (*Chementator*, Oct. 14, 1974, p. 52), mainly on the grounds that it is unnecessarily harsh and technologically infeasible. But the court disagrees, saying in part that the companies "simply need more faith in their own technological potentialities."

The ruling opens a possibility of easement for PVC fabricators. OSHA's new regulation covers them at present, as well as companies that make or polymerize vinyl chloride; but the court says that if vinyl chloride levels prove to be sporadic and low at PVC fabricating plants, the fabricators might be exempted (or subjected to a less rigorous standard).

The 1-ppm. ceiling was originally to go into effect Jan. 1, but in December SPI won a stay pending the (Jan. 31) decision. As of now, the effective date is April 1. At presstime, SPI has not decided whether to appeal the new ruling.

China might become a major natural-gas supplier to Japan. A Japanese trade mission now in Peking discussing gas projects says the Chinese are strongly interested in getting Japanese technical help for building natural-gas-liquefaction plants "several tens of times" bigger then the 150,000-ton/yr figure initially mentioned by the Japanese group itself during the discussions. A substantial part of the output, derived from the offshore Taiko oil-and-gas field situated in the Gulf of Pohai, would be shipped to Japan.

Today, Japan's gas imports consist of 1 million tons/yr from Alaska and 2.4 million from Malaysia. This total is nearly twice what Japan produces from its domestic wells.

And Japan is looking closer to home for oil, too, via an agreement with the U.S.S.R. over exploration and development of petroleum (and gas) resources off Sakhalin Island, just north of Japan and east of Siberia. The Japanese are talking with Gulf Oil about possible participation, as a supplier of capital and knowhow.

Under the agreement, Japan's Sakhalin Oil Development Cooperation Co. will extend to the Soviets a $100-million credit repayable only if oil and gas are found, plus a $52.5-million regular credit. Once oil production starts, the U.S.S.R. will supply Japan with 50% of it over a 28-yr period—at a price 8.4% below the prevailing international level, for the first ten years.

Two other Japanese-Soviet agreements for Soviet oil or gas development, in the Tyumen and Yakutsk regions, are currently stalled because of staggering capital requirements. Japanese observers give the Sakhalin venture a better chance of success, because its closeness to Japan will keep transportation investments down. If the project materializes, it should considerably ease Japan's heavy dependence on Middle East oil.

Westinghouse still expects to make a go of its offshore-nuclear-plants venture at Jacksonville, Fla., even though Tenneco Inc. has bailed out by selling Westinghouse its 50% interest.

The joint operation, Offshore Power Systems (OPS), was founded in 1972 after feasibility studies by the two companies for an assembly facility to make floating

Chemical Engineering's biweekly flash form is the best read and most informative collection of essential news available to its readership. It is one of the most important elements in the publication and must, therefore, be instantly accessible. The familiar, colored stock can be discerned just by looking at the edge of the closed issue, and when the pages are flipped, the section is impossible to miss. The colored stock is the department's prime recognition symbol.

The "before," left, shows the typographic arrangement as it was imposed on the stock: the legibility and arrangement were perfectly satisfactory, merely lacking sparkle. This was, perhaps due to the choice of rather tired typefaces; and the logo was much too large (why gild the lily when the stock itself does the attention alerting?).

The "after," opposite, retains the wide-column setting, actually somewhat wider to accommodate the same number of characters per line as before but allow for the wider Baskerville type that replaced the narrow Times Roman. The two vertical rules alongside the column were introduced not just to make the page look "different" or to give it some vague image of "printout" or "galley"; they were brought in because, in some mysterious way, they manage to tie the four pages together into a smoothly flowing unit, a single strand instead of four individual page-long segments.

The outrigger lead-ins were therefore sacrificed and brought flush with the left edge of the type column. To signal the start of each item and to reinforce the blackness of each headline, a six-pica-long stub overscore was placed above each lead-in.

The logo is handled the same way as all other department headings; the dateline is smaller but still very much in evidence; folio and footline are centered.

New catalysts for automobile catalytic converters withstand leaded gasoline combustion products. Developed by Du Pont, and now undergoing tests, the catalysts are billed as a "major breakthrough" by company scientists.

The basic ingredient is a synthetic crystal, resembling perovskite in structure, that is built up from lanthanum, strontium and cobalt oxides. The crystal incorporates active catalytic components such as platinum, ruthenium and palladium, while screening these materials from lead and other poisons. U.S. Patent No. 3,897,367 was issued for the invention in late July.

Besides resistance to lead, Du Pont claims the formulation has many other advantages over conventional catalysts, including durability, thermal stability, and resistance to phosphorus, sulfur and, under most conditions, halogens. To back up these claims, the company is conducting automotive tests, and so far has chalked up over 20,000 miles on 1975 vehicles.

Perchloroethylene and 1,1,1-trichloroethane do not cause cancer, according to Dow Chemical Co., which has reported preliminary results of more than two years of inhalation experiments on rats. This conclusion, if it holds up to critical review, would clear the way for substitution of the two solvents for trichloroethylene, which the National Cancer Institute singled out in a March "memorandum of alert" as a possible carcinogen.

Of all the 192 animals exposed to 1,1,1-trichloroethane, and an equal number exposed to perchloroethylene, only one suspicious liver tumor was found (several others were of a type common to rats). The liver tumor occurred in a female that had been inhaling 1,750 ppm of 1,1,1-trichloroethane—or about four times the peak vapor-exposure-limit recommended by the American Conference of Governmental Industrial Hygienists. But Dow scientists concluded that the statistical incidence of this type of tumor was the same in control and exposed rats; hence, 1,1,1-trichloroethane is not indicated as a cancer-producing agent.

Studies on other chlorinated solvents produced by Dow are in various stages at the company's Midland, Mich. laboratories. Perchloroethylene and 1,1,1-trichloroethane were given top priority.

Polyimide resins capable of withstanding temperatures of 700°F are being groomed by Gulf Oil Chemicals Co., as the company nears completion of the first commercial plant to make a major component for the resins, BTDA (benzophenone-tetracarboxylic dianhydride).

While getting ready to produce BTDA, Gulf purchased technology from Hughes Aircraft Co. for the resins. Described as a new class of addition-curable thermosetting polyimides, these resins are claimed to exhibit exceptional thermal stability and ease of processing. Conventional polyimides withstand temperatures of no more than 550°F. The resins can be used as adhesives, or to bind molybdenum disulfide (at ratios of about 70:30 resin-to-moly), and then be compressed under heat to yield not an adhesive but a solid lubricant.

The multimillion-dollar BTDA facility at Gulf's Jayhawk Works in southeastern Kansas, near Pittsburg, should begin operation at the end of this month. No production unit exists yet for the polyimide resins, except for bench-scale facilities that provide the U.S. Air Force with small quantities. On a commercial basis,

These two examples are both from *Industrial Marketing*. The "before," right, uses both typewriter type and blue ink tinting over the whole page in an attempt to create the impression of a super-rush late-closing. One assumes that the reader will accept the implication that the logo and the typeset heading were preprinted and that the typewritten matter is imposed thereon as on a letterhead.

The "after" version, opposite, eschews the use of colored ink altogether, preferring to give the illusion of a "letter" by means of the ruled box which seems to define the edge of a piece of paper placed on the page. Neither version can be as realistic or successful as if the "letter" had actually been typed and then a photograph of it reproduced as a halftone, with a "shadow" cast by the letter completing the illusion.

Fortunately neither version uses regular typeset type for headlines as is too often done: obviously the introduction of material that cannot possibly have been set on a typewriter must immediately destroy the hot-off-the-typewriter illusion that the editors are trying to create.

The "before" illustrates a very normal typewritten page makeup, with the indentions, underscorings, capitalizations, and spacings that come naturally to the medium. The "after" adds a degree of graphic play to this *natural* use of the medium: by manipulating the space, it allows more imaginative use of the lead-ins, tucking the headline sentences into the white space that "belongs" to the preceding story. Thus much greater attention-grabbing capacity is built into the format. Yes, the page is gray all over, but that is a deliberate ruse and a positive attribute IF the typewriter illusion is deemed desirable.

Blue tint

Washington Report

BY STANLEY E. COHEN • *IM Washington Editor*

FOR THE PAST six years, expanding government programs have created new business opportunities. Now we are in a period of retrenchment. Some of the government-created opportunities will fail to materialize. Others will take different forms. Conservatives have established a firm grip on the machinery of the new Congress. The administration will be trimming and revamping, seeking to persuade.

On the home front: Stretchouts and cutbacks for the Great Society. There will be continued pressure for various programs to replace industrial equipment and installations which contribute to air and water pollution; less federal money for medical research, and for urban rehabilitation. More effort to involve private industry in such needs as low cost housing.

The Defense Industries. Boom years ahead. Orders are running 40% above a year ago, and still on the rise. Congressional conservatives will be pushing for the anti-ballistic missile project. If approved, it means an immense cost in terms of personnel and facilities.

International Trade: The conservative Congressional factions feel little enthusiasm for the administration proposal to ease barriers for trade with the Eastern Bloc. There may be trouble, too, over renewal of basic power to cut tariffs. Long, unproductive "Kennedy Round" conferences have been disenchanting. By ending punitive tariffs on imported watch movements and glass, the administration hopes to break the "Kennedy Round" deadlock, show Congress convincing results.

IN THE NEW power alignment, the conservatives deal from a position of strength. Their mandate from last fall's elections is fresh. They find the administration's budget in disarray; the business outlook mixed, with the big consumer industries--autos and housing--well below par.

Economic balancing act. Prices of basic metals keep spiraling up, and the amber light still flashes for investments in plant and equipment. Meanwhile, the government pumps money into the mortgage market, in an effort to bring down interest rates and stir up more home building.

The six percent surtax: Will continue to hang as a threat over the economy. Congress hopes to avoid it. But if it is going to push for projects like the anti-ballistic missile, it will fall far short of bringing budget deficits down to manageable levels.

Postage rates: The pressure is on to help pay for postal mechanization to move rising mail volumes and to ease the $1.2 billion post office drain on the Treasury. Real goal probably is a settlement along these lines: 6¢ letter; three annual 10% increases for magazines and newspapers; a 4¢ bulk third class rate.

Government statistics: White House will fight to save its Census of Business and Manufactures from the economy ax. Due to be taken in early 1968, it provides fresh benchmarks for marketers as well as economic analysts. Major new ingredients: Breakdowns showing channels of distribution for industrial products, the first since 1958. A census of construction industries, the first since 1939.

By STANLEY E. COHEN, IM Washington Editor

Our increasingly interdependent society is accustomed to rising government influence over the kinds of products that are made and how they are sold. Probably that's why there is so little dismay, despite the rapid strides in these directions in recent months. Health and safety have become major justifications for federal action. Federally enforced safety standards for gas pipelines and electric utilities are high on this year's legislative agenda. So are tougher flammability standards for fabrics. A law covering the design of color TV sets and other equipment that emits radiation is in the drafting stage. In the executive branch, air and water pollution standards will require changes in product design. Automobile makers are beginning to respond to the requirements of the automobile safety law. Tires are next. They will have to have a built-in "ply-gauge." And there will be new standards for tires by load capacity.

Legal liability is another consideration which opens the way for expanded federal intervention. The new Commission on Product Safety, likely to be authorized this year, will become a repository for new ideas. It wants to find out who tests potentially dangerous products; who imposes safety regulations; how much liability the manufacturer has if the product fails. How to sell it; Anti-trust takes on more sophisticated concepts. In the ABC-ITT merger litigation, Justice Department stressed "reciprocity" as a questionable practice. Recent Supreme Court decisions, such as the Schwinn case, narrow the manufacturer's influence over dealers. Other government activity is keyed to demands for more "consumer information." "Truth-in-Packaging" and "Truth-in-Lending" try to define the kinds of information sellers must give to buyers.

Government sees itself as a helper as well as a regulator. After numerous false starts, Commerce Department finally seems to be organizing itself to look out for the interests of marketers. Through its new distribution advisory committee, it'll be encouraging joint efforts to explore such problems as: how to improve the public image of business; how to recruit bright young people into marketing and advertising; how to examine the contribution of advertising to economic growth. Government plays other roles, too: Export stimulator--New Kennedy Round tariffs yield concessions in the 50% range for about a third of our exports. Commerce Secretary Alexander Trowbridge urges marketers to take a close look. Marketing statistics--Even agencies like IRS are trying to provide data that helps define markets. Post Office Department's ZIP has become a marketing tool, too. Self Regulation--New Commerce Department procedures will make it easier for industries to agree on "voluntary" standards. And anti-trust law no longer precludes self-regulation-with-teeth.

HOUSING HOTLINE

LAST-MINUTE NEWS

Fannie Mae jumped into the mortgage pass-through arena last month with a $746 million offering backed by insured mortgages carrying rates of 9% to 10%. The mortgage bankers association of metropolitan Washington (MBAMW) announced, coincidentally, that Maxwell said the program will be extended to include new mortgages, not just the old. More developments: Fannie Mae will also purchase second mortgages made by lenders and in connection with refinancings. Another twist: Commitments under Fannie Mae will get if it succeeds in its bid to apply operating income to net losses carried during the past two years. If its plans succeed, Fannie Mae will owe a $946 million tax refund instead of a paltry $400 million.

Rent control took a beating at the polls last year, claims the National Multi Housing Council — thereby overwhelming state opposition of rent control initiatives in local elections in five communities, from conservative Fresno to liberal Berkeley. The public backlash against rent control is the most obvious evidence to date that tenants no longer view rent control as an answer to their housing problems." The local victories also pushed rent control opponents in Washington, D.C., New Brunswick and San Rafael, Calif., and Minneapolis. More: Rent control may be ending, but city-by-city regulation is not. Nearly 700 jurisdictions still maintain some sort of zoning restrictions on apartments.

U.S. Home Corporation swapped $15.3 million of debt for 901,592 shares of stock — more than anticipated stockholders agreed by $3.1 million and resulted in a $3.2 million tax-free gain. But other recent reports on the company figure somewhat in the new planning. The corporation announced a $11.4 million loss for October, and an advisor with investment firm Smith Barney, Harris Upham & Co. said U.S. Home could show a loss of $7.7 million or more for 1987's fourth quarter. Poor earnings could also trigger tax loopholes that would prohibit U.S. Home from paying dividends anytime soon.

BEPS was bleeped for yet another year, reports Bonnie C. Chastang, a member of the National Assn. of Home Builders' Multi Tax Division. And when the Building Energy Performance Standards finally do become effective in August, 1993, they will be weaker than originally proposed — and will apply to fewer buildings. Chastang explains that the BEPS standards for privately owned buildings, like other tax-code liabilities, Congress delayed the effective date of the standards for two-and-a-half months. A recent amendment to the BEPS standards will further soften the additional cost's delay and the conversion to voluntary compliance.

Don't tamper with the home mortgage interest deduction! That was the message the Senate sent to the government when an attempt to cut $3 billion in spending was quashed during the scheduling of annual caucus in home mortgages. Senator Lloyd Bentsen (D.-Tex.) complained the resolution is devoid of what he called "serious budget savings" from the Treasury Department that its annual cap of $10,000 or $20,000 for each taxpayer is being considered as a source of increasing budget deficits. "Then they're splashed with a cap," Bentsen said. "It would be relatively easy to continue to look to it, though until it was finally implemented." The amendment limits home interest deductions on home mortgages over a maximum $750 million a year.

Merrill Lynch plans to acquire Advance Mortgage Company for an estimated $47 million (story on page 5). Rick Thompson of Merrill Lynch said its "agreement is mutual" and was reached to acquire Advance through Merrill Lynch's real estate financing subsidiary, Merrill Lynch Hubbard, which already has a $2.7 billion first mortgage portfolio. Advance Mortgage, a subsidiary of Independent & Co., and one of the large mortgage bankers in the country, now services over $4.6 billion in first mortgages. News of the planned acquisition touched a nerve over at Housing, the New York City-based bank servicing company, which also has a sizeable staff of Advance Mortgage in September. (19 order orders from the Federal Reserve

Housing, Joe Davis

Full, sense-making topic sentences in bold lead into rest of paragraph. Yellow tinted page, red logo.

Turner, CBS Hold Merger Talks, But Neither Displays Much Enthusiasm

CAT NEWS

BROWN & WILLIAMSON TOBACCO CORP. (Louisville, Ky., Investments) last Friday that it has moved its Kissing cigarette account from McCann-Erickson, New York, to Grey Advertising, New York. McCann-Erickson retains the Kool and Viceroy accounts. Billings were $ 40 mil. Chicago, continues as agency for planning and placement of media advertising for all brands, including Kissing. Billings were not disclosed. In 1979, billings were $16.5 million, in 1987, billings were $72.6 million.

THE U.S. SUPREME COURT HEARD ORAL arguments on Tuesday in a case that could restrict the ads of Bowflex, Zinc and Telecommunications, Inc., that will determine whether cities can be sued by cable companies or other businesses on antitrust grounds. The landmark case involves a building moratorium that the city imposed on TCI of Northern Illinois operator, halting the cable company's expansion in Bowflex. TCI has filed an antitrust suit against Bowflex, claiming it was unfairly restricting them. If TCI wins its case, some attorneys believe that cities will be open to a host of antitrust suits from cable companies. The court is expected to issue a decision before the end of the year.

READER'S DIGEST WILL PUBLISH A monthly Greek edition beginning next February. A premiere issue will appear in November. The new edition brings to 17 the number of languages in which the Digest publishes, not with an expected circulation of 35,000. It will be the fifth edition of the magazine. The Greek Digest will be mailed to about 1,000 subscribers from Headquarters and be distributed.

USA NETWORK, ELSA PECK, N.J., has agreed to pay New TV a price in its Simon & Schuster building at 1230 Ave. of the Americas. The price will mean the advertising sales department, comprised of account executives and an advertising sales manager, to be named shortly, in a statement issued by the network. Officials of the company declined to say. Rev. ... Series that a New York ... previously ... Entity establishes the network along Broadcast Row, as a leading cable television company.

THE LONDON DIGEST OF DANCING Magazine today announced its new business upon by winning lower operator Mary Ann Lee, who will receive a prize of $1,000 for the performance. Mary Ann Lee's ... The office has served 10 ... Previously, the ... has been ... including $1 million by rubber glove brand Marigold, and $1.5 million for all Hardware Brands Arbor and Tobacco Corp.

NY Post' Task Force To Study Putting Out Sunday Paper

Green Is New MFA Chief

Heublein Taps Conn. Shop

Adweek, Walter Bernard

Late news boxed column is set off from rest of publication by dark italics set ragged right. Yellow tint in box, red logo.

LOOK AHEAD

Datamation, Cleve Marie Bottelli

Typewriter memo format with free-standing heads separated in left-hand rubrics. Brown ink on brown tint.

UPDATE

MULTILAYER ICs **Semiconductor topologies soon will resemble** multilayer printed circuit boards, says Wm. Sturgis. Fairchild Semiconductor's VP of mktg. Fairchild is already developing a 3D imaging device with three layers of poly-silicon interconnect. Longs expects to see five interconnect layers — three polysilicon, two metal— when circuit densities reach 100,000 gates/chip.

SPEECH MODULE **Texas Instruments has expanded** its TMS6C microcomputer module family to include a speech module containing an industrial vocabulary of over 190 words. Designated the TMS6C306, the module has an amplifier capable of driving an 8-ohm speaker at 2.5 watts. For more power, an external amplifier can be connected to the preamplifier output of the $1260 unit.

COMPUTER LINKS **IBM researchers in Zurich** are investigating the use of infrared light communication between mainframes and terminals to overcome the inflexibility of cabled systems. The system comprises of a satellite station wired to the host computer and mounted in the ceiling of a room containing computer work stations. An array of LEDs on the satellite unit enchantes data with similar arrays on the terminals. Reflected infrared light floods the entire area, so line-of-sight transmission is not necessary.

LINEAR CHIPS **Linear integrated circuits** with sensors for temperature, light or magnetic fields built into the same chip offer a giant potential market, says Robert Dobkin, director of advanced circuit development at National Semiconductor. Integrated temperature sensors that can already handle up to 400°C should find wide use in industry, predicts Dobkin. All other temperature sensors (i.e.— thickness or platinum wires, thermocouples, thermistors, to metal) chips are non-linear, require lots of costly electronics and need to be calibrated. Integrated temperature sensors can deliver linear outputs, and on-chip trimming can set voltage reference values to 0.01%, he says

64-K RAM MARKET **The market for 64-K dynamic RAM** random access memory chips will be over $1 billion, up to five times larger than the 16-K market, predicts Dr. Richard L. Petritz, president of Intex. One reason for the big market for 64 K RAMs, added Petritz, is that the technology for these complex devices will make it difficult for systems companies to compete economically with in-house facilities. This will be one of the early products of the new firm he heads, funded by $100 million from the British government. Plants will be built in Colorado Springs And in England to manufacture visit products

JAPAN PLANS R&D **Innovative materials r&d projects** will begin this year in Japan once plans developed by the Science & Technology Agency are OKed. Four study themes recommended include research on amorphorous and superconductive materials, as well as on high energy chemistry reactions and ultra-high pressure materials. The projects would continue for 3 to 10 years with government funding of +1-4 billion about $4.25-$17 million). Different laboratories under the Agency's jurisdiction such as the Research Development Corp. of Japan, as well as university and industrial labs will be invited to join the programs. Each program will be

High Technology, Virginia Murphy-Hamill

Stylized typewriter-format; topic heads in margin lead into boldface lead-ins then into text. Grey tint.

Business outlook

William R. Hamilton: *Time Outlook Editor* - December 28, 1981

A gradual consumer pullback as the skids steepens

Consumers are becoming more cautious in response to slowing economic activity. But the data do not yet show the abrupt retrenchment that usually accompanies a recession.

After adjustment for inflation, the figures reveal that consumers have gradually been reducing their spending since early last spring. They are dragging their feet a bit more these days, but have not cut back to the extent that they did during the 1980 recession.

Business executives have recently slowed their pace of capital investment, but plans for early 1982 still call for some modest increase, even after adjustment for inflation.

While the initial reaction of both consumers and businessmen indicates that they were not spooked early in the recession, that is now changing. The downturn in business activity is picking up speed, and there is no further room for error.

Hints of this show up in production with fall. What is clear is that it is still falling, and the decline is accelerating. Production is declining rapidly in response to rising inventories and falling sales. The December index is in a steep decline (page 2).

Nor is it clear how quickly the unemployment rate will rise and how high it will go. New claims for unemployment compensation, seasonally adjusted, soared to almost 600,000 in the first week of December, for the largest number since the economic slide began.

A "shotgun" rate in factory output would quickly turn the modest plus of capital spending plans into a sizable minus. At the same time, a sharp increase in the unemployment rate would almost certainly put the rug out from under retail trade.

Retail spending brings mostly bad news

The most recent consumer spending figures provide little Christmas cheer despite a recent uptick. The good news is that spending in retail stores during November rose 0.8%. Since the increase includes part of the October holiday selling season, that seemed to offer some hope that maybe the weakest stage would not turn out too poorly after all.

The bad news is that the October sales figures, which had earlier been estimated to have increased 1.0%, were revised downward to show a much larger decrease of 2.0%.

Sales for the two months averaged 0.6% increase, seasonally adjusted. If they held down to the level of the third quarter, they would be only a wistful hope — sales would be off 1.2% for the quarter (compared with the previous quarter). And this is in current dollars. After adjustment for inflation, the real sales terms would be about 2%. This single statistic, we believe, spells 1981 below the peak, touched in March.

If unemployment is still on the upswing, as it appears to be, shoppers can expect a poor post-holiday selling season. Moreover, about

Retail sales can turn up—and frisky—even during recessions, as long as the

Business Week, John R. Vogler

Rough, two-colored stock is characteristic of four such newsletter inserts in each issue.

BUSINESS THIS WEEK

Busting up

America's justice department announced a lawsuit last against AT&T. The telephone company agreed to spin off its 22 operating companies in return for freedom to enter new fields of data processing and telecommunications.

The justice department also dropped its 13-year-old antitrust suit against IBM. Its case was too "limited," it said.

American unemployment reached 8.9% last month—a rise of two percentage points, or 2% as workers since July 1981.

European investigators prepared to counter the export-boosting effects of another Soviet gas boondoggle. American steel companies to

General Electric reports Mr. Reagan's sanctions against Russia will cost $ 175m in lost orders for the Siberian gas pipeline.

Du Pont's dismal sales dropped by 40% to $1.47 billion last year.

Gold fell to $380 an ounce—its lowest price since October 1979.

General Motors is agreed with union leaders to limit wage cuts with lower car prices.

Chrysler have now reported profits, if any, for the 1981—12% below 1980's results.

Unions proposed a liability to give export credits at low interest rates to exporters from developing countries.

Shoukan Belgian steelmaker Cockerill Sambre negotiated a $700m debt restructuring with its government.

Chrysler announced 1981 sales of $2.3 billion. 30% higher than 1980's.

Australia's Woodside Petroleum delayed plans for offshore gas developments because of the oil glut and the fall in demand for Japanese liquefied gas.

Coalminers in New South Wales and Queensland struck for more pay.

Government investigators reckon that Britain's nationalized Rover paid $600m less in production royalties than they should.

International Harvester plans to sell $ 700 m's to her creditors for savings this year.

Christina Onassis was elected to the board of the Uni n of Greek Shipowners.

IN BRITAIN

Busting in

Australian Robert Holmes a Court made an offer for Lonrho to take Associated Communications.

Companies pre-tax profits rose 11% in the first quarter of 1981—and rose shares 6 North Sea oil. Profits outside the oil industry were up 19%.

Central government borrowing seems likely to be either its £11 5 billion target for 1981-82, despite the tax gimmicks further ideas.

Manufacturers wholesale prices rose 1% in December the smallest rise for seven months. Raw material prices stayed flat.

Claims for food and snow damage to 1,000 acres of winter mountain companies £100M.

Britain that threatened to suggest slowing gas divers.

BL audited components to keep output and despite the big freeze.

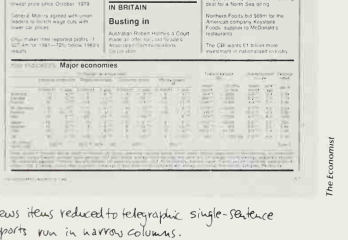
The monopolies commission blacklisted both bids for the Royal Bank of Scotland.

The government told leaders of 320,000 civil servants that their claim for a 13% pay rise was unrealistic.

Lloyds Bank signed an £80M leasing deal for a North Sea rig.

Northern Foods bid $69m for the American company Keystone Foods, supplies to McDonald's restaurants.

The CBI wants £1 billion more investment in nationalized industry.



Business Week

News items reduced to telegraphic single-sentence reports run in narrow columns.

Radar

O Congresso não pode tocar nos atos

No segundo dia de sessões, o Congresso que pode derrubar a ministerial brasileira já derrubou, fazendo-a recuar, emendas feitas ao projeto que fixa os critérios para a correção monetária dos salários. Hoje, os deputados começam a votar as emendas, sobre as quais o governo já avisou que só admite duas: uma que estabelece um teto para o reajuste dos salários mais altos e outra que altera a data-base dos reajustes, de março para janeiro. Mas, mesmo que essas duas emendas sejam aprovadas, o governo não vai mudar sua política econômica, garantiu o ministro do Planejamento, Antônio Delfim Netto, ao anunciar que o Executivo não vai alterar o projeto.

Ministro Delfim

Petróleo novo alivia os russos

Os russos também vão ter importantes descobertas de petróleo no Cazaquistão, uma província da Ásia central. Trinta dias depois da descoberta de um grande campo petrolífero em Tengiz, também próximo a mar, outras quatro encontraram reservas de dezenas em equipamento de perfuração. As descobertas ocidentais, feitas recentemente pela rede de empresas Exxon, Mobil, Shell, Elf e Agip, ou individualmente, estão sendo interpretadas como uma tentativa de dividir os 80 consórcios com a ameaça de uma severa crise de petróleo sobre o mundo.

Ou o padre sai, ou é expulso

O padre italiano Vito Miracapillo, da província de Ribeirão, a 301 quilômetros de Recife, que se envolveu em várias manifestações contrárias ao governo da Ação Centrai Trabalhista, da cidade de Campanha, pode ser obrigado a deixar o país. Segundo informou o seu último recurso encaminhado ao ministro da Justiça, Ibrahim Abi-Ackel, o padre Vito Miracapillo reconheceu ter se envolvido em atividades políticas, mas alega que não pode ser deportado porque, em 1980, teve o pedido de naturalização aceito. Se o ministro mantiver sua decisão de expulsá-lo, o padre Vito Miracapillo terá a alternativa de entrar com um mandado de segurança ou deixar o país.

O sanador é general aposentado

O senador Luiz Cavalcante (PMDB-AL) declarou ao semanário paraíba o seu presidente Ernesto Geisel, por ocasião do seu aniversário, transcorrido ontem, que "ele é uma grande figura em todos os sentidos". Segundo o senador, o ex-presidente "é sempre inteligente e aprumadíssimo". Por certo o senador não se lembrou de Ernesto Geisel, o general Luiz Cavalcante, quando ainda ministro do Interior, em 1977, ao ser nomeado por um ato unilateral do senador Luiz Cavalcante. Foi justamente porque ele era ligado ao governo. Alguns dizem que o senador continuou para o dia em que se aposentou o ovo, com

Veja, Pedro De Oliveira

Blue-tinted stock, photos run in horizontal line screen ("radar"); normal news format

business newsletter

Carbide wraps up Phase 1 of an expansion

Exxon Carbide put the finishing touches on the first phase of a petrochemicals venture that makes monomer (VAM)—expansion at its complexes at Texas City, Tex. Capacity in the plant, which produces VAM from ethylene and acetic acid, has been boosted from 350 million to 450 million lb/year. The second phase, now under way, will bring capacity up to 600 million lb. in 1982. Just one year ago, Carbide shelved plans to increase its 200-million-lb/year VAM unit and expand its other Gasoline Materials Div. plant at Brownsville, Tex. Dave Davidson, President Jack Kerrigan, Jr. said expansions will enable Union Carbide to maintain its position as one of the nation's leading producers of acetic acid and vinyl acetate—demand for which is expected to increase at a rate of 8-10% per year through 1985.

...and increases its lines of credit

In an unrelated move, Carbide says it has lifted its lines of credit from $600 million to $1 billion. Chairman William S. Sneath notes that maintaining the present pace of the company's construction program will result in more than $1 billion/year with requires additional long-term external financing. "The availability of the lines credit arrangements," said Sneath, gives Union Carbide considerable flexibility with regard to the timing of long-term financing." The last previous increase in the company's lines of credit, from $400 million to $600 million, was in 1976.

Social pondera a new offer for Amax

Brief resistance from Amax management was belied yesterday with the announcement that the group has posed $4-billion merger offer for Amax of W. Mor. 25 a (11). The acquisition would have been the largest ever if it had been approved. Industry observers, however, are skeptical that Amax will survive such an unfriendly offer something in the near future, especially considering that it nearly comes 20% of Amax stock and had previously tried to purchase the diversified mining company in 1978. Moreover, Social refuses to say whether it has raised the $4 shot on any further attempts to take over Amax. Says one corporate spokesman: "I don't think we really know whether at this point." The spokesman, he says, "still believes that its offer was fair and that a merger of Amax would be to the advantage of the shareholders of both companies and in the national interest."

Du Pont gives up on an antiknock plant

Second one of the six plants Du Pont manufacture lead alkyls in the U.S. The unit to be shut down by Aug. 1—the only one west of the Rockies—is part of Du Pont's complex at Antioch, Calif., other units at that complex are still not affected. Du Pont says the closure is necessitated by declining U.S. demand for gasoline antiknock additives based on tetraethyl lead and tetramethyl lead. The dwindling demand, of course, reflects the federal government's decision to phase out the use of those additives. Du Pont will continue to produce TEL and TML in its Chambers Works at Deepwater, N.J. Other producers are all on the Gulf Coast: Ethyl at Baton Rouge, La., and Petro-Tex, PPG Industries and Nalco Chemical at Freeport, Tex.

Du Pont's economist foresees an upturn

The economist in charge of forecasts for the nation's largest chemical company is looking ahead to a new boom period for chemicals and for the economy as a whole. Chemical production, says Du Pont's Charles H. Reinker, will grow at an annual rate of 4% this year—two percentage points faster than overall U.S. industrial production—and 6.5% in 1982. While this forecast plays 1981 as a transition year, Reinker told a chemical marketing group in New York last week that the bounce cycle has definitely hit its nadir and now is pointing back up again. His prediction for inflation-adjusted gross national product: Up 2.7% this year and a further 4.1% next. Reinker contends that inflation, which ran nearly 10% last year, will rise to 8.5% this year and, at best, to 8% in 1982. Frankly, he says, "it's hard for me not to be optimistic."

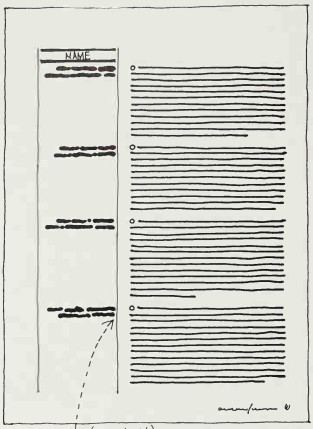
Cash poor Koppers still wed for wealth

Koppers Co. Inc. of Pittsburgh, Pa. announced, in still a cash poor company with 60,000 shareholders, but by the time of the merger, only to the grace of the Federal Trade Commission, it will have just one shareholder—Beatrice Foods Co. The one shareholder Standard Oil of Ohio, a big beneficiary of the Prudhoe Bay oil boom on Alaska's North Slope. Koppers's consensus present owners ratified the deal for Sohio to buy up all Koppers's stock for $1.77 billion, at Wednesday. Koppers Chairman Thomas D. Barrow was jubilant, pointing out that "Sohio is in a position to assure Koppers the needed funds"—$1.4 billion over the next four years "for expansion and expansion". Anaconda, the country's second-largest copper company, has also been taken over by Atlantic Richfield four years ago. There has been gossip about a possible attempt to take over Phelps Dodge, No. 3 in the copper industry, but during 1-Pt's annual meeting last week, Chairman George B. Munroe scoffed at those rumors, suggesting that "there's nothing to them."

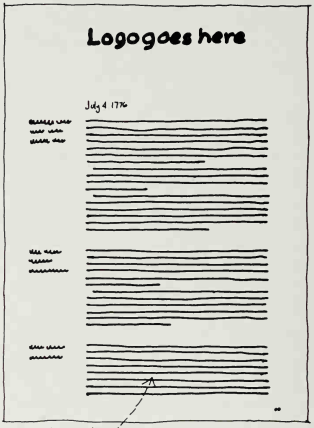
Chemical Week, Robert T. Martinott

Trim, light-ruled box encloses page, typical of several similar ones. Crisp logo.

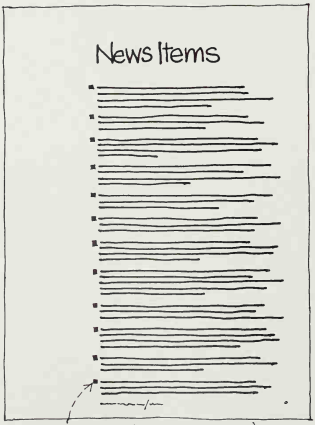
The Economist



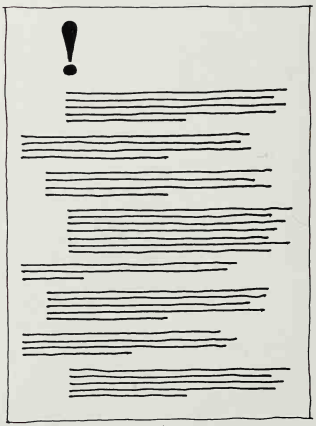
Vertical rules (very light) contrast with bold heads



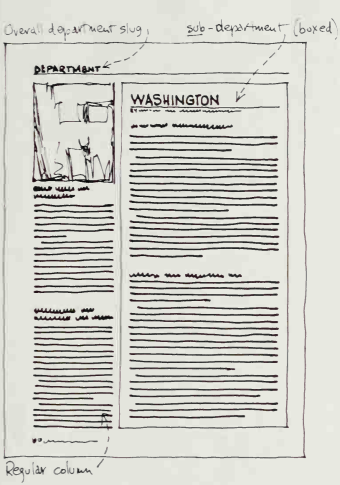
Key words within copy emphasized in boldface

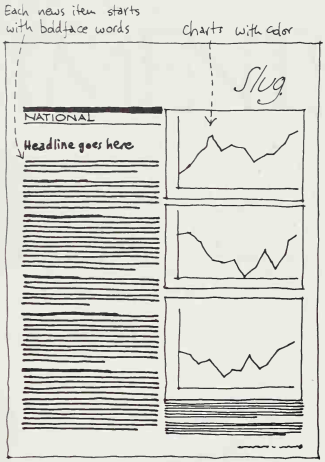


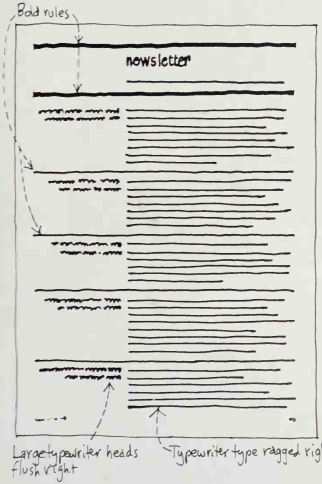
Some graphic symbol (e.g. a black square) signalling the start of each new item

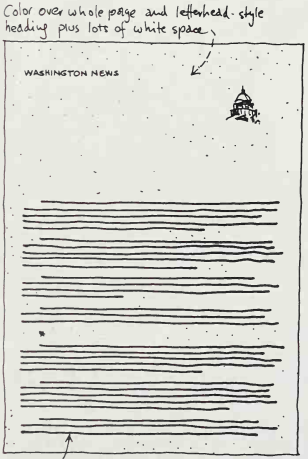


Maximum line length is standardized but placement on page is staggered


Overall department slug
sub-department (boxed)
DEPARTMENT
WASHINGTON
Regular column


Each news item starts with boldface words
Charts with color
Slug
NATIONAL
Headline goes here


Bold rules
newsletter
Large typewriter heads flush right
Typewriter type ragged right


Color over whole page and letterhead-style heading plus lots of white space
WASHINGTON NEWS
Underscoring of typewriter type (instead of boldface headlines)

The battle for the reader's attention between edit and ads

DEPARTMENTS

This is a generic term, referring to all the pages normally run in a publication that are not "feature stories," the cover, or advertising pages. Thus, strictly speaking, all the other chapters in this book discuss "departments." However, since it is logical to break various departments out of the total package for separate treatment, this chapter deals with general principles — whatever isn't covered elsewhere.

Department pages are, by definition, individual pages scattered throughout the publication, somewhere among the ads. There are, of course, many exceptions to this generalization: sometimes a department is so important and so large that it begins to be the tail wagging the dog, or sometimes, where it is a good tactical ruse, it is positioned within the "editorial well" (i.e., the feature section). But, for most publications, the scattered-throughout-the-magazine definition holds true. It holds true in enough cases to warrant thinking of the pages that way and to design them in such a way as to make the most of them.

Designing departments, surrounded as they are by flamboyant visual materials in the ads, is not easy. Certain basic principles must be accepted and followed. The most basic principle is to recognize the problem — and this, in itself, is none too easy. Editors are often too close to their work to allow them this perspective. They are given X number of page positions to fill and the advertising department fills the others. The printer is the first to see the two sets of pages together in one place, after him, the reader. When an editor "looks at" his publication, he "sees" only a part of it — perceiving the editorial pages and seldom noticing the ads, except where the ads impinge on his consciousness through some magic quality of their own, or when they clash with the editorial matter in some embarrassing way. From this perspective the editor sees each successive space as an entity, each one a separate problem with its own solution. The essential interrelationship between these entities is a factor editors tend to forget, simply because they automatically conceive of those spaces as being interrelated, after having worked hard on *all* of them. The trouble is, of course, that the reader does NOT think of them as separate entities for two reasons: first, he doesn't know how many there are, since they appear one by one and,

second, he doesn't recognize them for what they are because they do not look related.

For the reader to notice the scattered pages and realize that they belong together, it is necessary for them to have a rigidly adhered-to format which will give them a family resemblance that is so undeniably strong it will come through even with the most casual fast-glance and in spite of the distracting will-o'-the-wisp images in the surrounding ads.

Unless the editors accept the necessity of this family resemblance, they will have difficulty living within whatever format restrictions may be the overall design policy of the publication. There is a problem here: editors are indoctrinated to make the most of everything and to make it look interesting. One of the ways to achieve that quality of "interestingness" is to make each bit of material look "different" from all the other material. Journalists tend to seek freedom of expression and here they are being asked to limit themselves voluntarily. To get their cooperation it is important that they understand the problem from the broad, publication-as-a-product point of view. Let us assume that such insight has been reached. Where do you go from here?

1. Underplay the presentation

To make the most of the material on the scattered editorial pages, it is necessary to make them as different from the ads as possible, while, at the same time, making them as similar to each other as practical. Since the ads are all very different from each other and vie for the reader's attention through unpredictable arrangement, color, black headlines, etc., perhaps it is wisest to go to the opposite extreme and make the editorial pages appear serene, quiet, and predictable. The ads will act then as foils to the edit pages, and edit pages will become noticeable by their very grayness.

2. Make up a colorful dullness

An outgrowth of the underplayed presentation principle mentioned above, this is a more *realistic* approach to the problem. Assuming

that the publication has a lot of gray type that needs to be accommodated (eo *ipso* "dull" in appearance), the only way to create the required liveliness that a page must have to make it memorable (while still retaining its disciplined serenity in contrast to the ads) is to give it a few spots of "color," and such color means simply "black ink." On pages 94 and 95 a "before" and "after" example of the opening page of a major section of *Library Journal* is shown. The purpose of the contrast is merely to illustrate the possibility of creating "color" through the judicious application of bold type contrasted with thin rules, light type, and some white space. There is, indeed, less copy on the "after" page than on the "before," but the sacrifice was deemed worth making for the sake of the attention-getting design qualities appropriate to the opening page of a major section.

On the next two pages are other examples from the same magazine, showing the way other departments are handled as part of an overall discipline, with the "color" designed in by different ways (though nowhere as strongly as on the news section and the book review section openers).

The way in which the department headings are used, the spaces retained, and vertical rules inserted all lead to the next principle. . . .

3. Repeat patterns rhythmically

It is not necessary to describe a specific pattern that is to be repeated. Whatever it may be, its value derives from the repetition itself — not just an echo, or a vague, slightly altered repetition, but an exact, absolutely precise repetition. This is the only kind of repetition, so precise that its simplicity cannot be missed, that works effectively.

If the repeated material consists of ruled lines, they must be of equal weight in all cases and begin and end in the same position to give the appearance of deliberate repetition.

If the repeated material consists of pictures, such pictures must be placed in the same position on each page, and their proportion must be precisely the same, or they won't look as though a deliberate interrelationship was intended. It is not good enough

just to have a picture in the top right-hand corner, hoping that that will do the trick. Nor is mere similarity of shape adequate, though geometrical peculiarity is a great help (like making it unequivocally square, perhaps). But repetition of exact size is crucial.

If the repeated material consists of nothing but white space such as a deep margin at the head of the page, then that white space must be utterly clean and of clearly articulated depth (or it will look accidental, IF it is noticed at all!). To ensure such precision, perhaps it might be best to define the edges of the white space with a graphic element such as a box, two horizontal rules, a bullet in each corner, or whatever may "read".

If the repeated material consists of graphic signals of some sort, then those signals must be designed as a coordinated group, so that they have the quality of repetition even though each individual signal may need to show a different word or image. See the headings within the copy on pages 198 and 199.

4. Invent a peculiar format

If the material lends itself to such manipulation, it might well be useful to package it in a fresh way — anything other than the normal three-column format. Two illustrations of this alternative are shown on pages 98 and 100. Both are based on a centered-trunk principle, from which the heads branch out and beneath which go the stories; both depend on having short items so that enough headlines seem to "grow out" of that central trunk.

On pages 102 and 103 are two examples based on other gimmicks (let's call a spade a spade): the one on page 102 uses a standardized underscoring-cum-vertical-hairline attached to the flush-left edge of the column. The ragged-right setting of both the heads and the text make it appear as though the text was attached to the vertical rule, especially since the vertical rule is chopped off flush with the last line of the item. Thus we achieve a unitization of stories: making-little-things-within-a-big-context.

On page 103 is an example which attempts to do the same thing, i.e., unitize each story separately. However, in this case, pictures and long headlines are involved; a four-column format is used, which

devotes the left-hand side to a subdepartment and the right-hand to normal stories.

5. Relate to the cover and the feature section

The editorial product is a totality. In conjunction with the ads, it is packaged as one three-dimensional article. This is how the reader receives it, and this is how he thinks of it: one object.

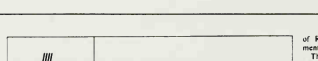
Although this chapter concentrates on departments, it is necessary to remember that the departments are merely a part of that object. It is important, therefore, to remember that the graphic image the departments transmit must be produced in the context of that unified product. Thus it is highly advisable that the typography be the same in the departments as in the features, certainly as far as text face is concerned. It is perhaps even more important, though, that the headline type be of the same family, since display typography is attention seeking, visible, and thus, very important. If the body copy has a consistent quality of texture and color, and the display type retains a family resemblance, then the publication is well on its way to unity. If, then, the department headings are visually related to the logo on the cover and both logo and department heads relate to the display typography, little else can be done to ensure that visual unity. *Industrial World*'s logo shows a three-dimensional version of Helvetica (custom-made); department headings are an outline version of Helvetica (custom-designed with the rule), and article headlines are machine set Helvetica of some sort. There is no question of their "belonging."

Pages 104 and 105 show an example from *Industrial Engineering* magazine which takes the process one step further: since each of the articles requires a short summary for information retrieval, the summaries are always placed in a four-line box at the top of the first page of the article, together with the writer's byline and affiliation. The one inch high unit thus becomes a readily recognized symbol of story starts. The same one inch high unit is used in the departments for housing the department heading (flush left or flush right, depending on page position). The two sets of signals work as a series of links in a chain throughout the publication.

On this and the following pages are shown typical departments from *Library Journal*. They have been chosen to illustrate the consistency of the overall solution as well as the subtle differences between each department treatment, since each needs slightly different handling to express its particular content most effectively.

The differences are manifested in the headline treatment and the composition of the pages; the raw materials, however, remain the same: same typefaces, same strong contrasts between body and headline type, same hairline rules between columns adding texture and interest, same heavier rules above headlines, same department headings, same spacing between elements.

The two major department openers (the News page, opposite, and the Book Review opener on page 97) have more white space than the others. This serves two functions: it makes them stand out, and it is a necessary foil to the bold, heavy type of the department heading. Compare this solution to the "before" version at right, which uses the same body type-



NIXON SIGNS $32.9 BILLION BILL; RELEASES IMPOUNDED $$

President Nixon has finally signed into law a bill appropriating $32.9 billion for fiscal 1974 programs under the Department of Health, Education, and Welfare and the Department of Labor. Other versions of the bill had been vetoed previously by the President, and Congress—unable to override the veto—had enacted continuing resolutions to fund library programs on a temporary basis. Congress did reduce its appropriations demands by about $1 billion in the current bill, which still exceeds Nixon's budget request by $900,000. In a related action, Nixon released $1.1 billion in education and health money that had been impounded—an action seen by critics as a stratagem aimed at preventing the release of appropriations exceeding his budget targets. The impoundment policy has been assailed by a flood of lawsuits—30, at last count—charging the administration with illegally withholding funds. In most cases the White House has lost its argument in federal district courts, which have ordered the release of some $966 million, but the Administration is appealing many of these decisions. Before Nixon decided to release some of the impounded funds, Congress had already refused to accede to a proposal that would have, in effect, nullified the anti-impoundment lawsuits.

Sarah Case of ALA's Washington headquarters told *LJ* that some of the impounded funds soon to be released will support various library programs. She noted that the court suits that were won at the district court level were taken into consideration when the Administration decided which funds to release. Thus far, the HEW has announced that those funds are to be returned: $51,750,000 in impounded Library Service and Construction Act funding is to be returned to the states. $10 million in funds earmarked for books under Title II of the Elementary and Secondary Education Act, and $48 million for NY, equipment, and remodeling under Title III of the National Defense Education Act (NDEA). One source, she said, indicated that libraries will have two years to spend impounded funds, but she noted that the HEW has not yet come out with a firm policy on a deadline for the spending of impounded funds.

Paul H. O'Neill, associate director of the budget office, in charge of human resources and community affairs, told a *New York Times* reporter that about $600,000 of the released funds would be spent in the current fiscal year, which ends next July 1. The released funds, he said, cover the full range of education and health programs, and programs involved will receive increases varying from five percent to a doubling of their budget—depending on variations in the law. O'Neill predicted, "There will be a surge in programs in the pipeline." Some $13.5 billion in funds for other programs, including $6 billion for water treatment plants, have not yet been released by the Administration.

Released funds for library service, said Case of ALA-Washington, will be distributed in accordance with the formulas of the various grants. LSCA, for example, stipulates that block grants are to go to the state library agencies, which will subsequently decide exactly where the monies is to be spent.

Commenting on the prospects for libraries under Revenue Sharing, Case said that libraries are in a much stronger position financially than they have been for quite some time. They will be receiving large blocks of impounded funds, the regular appropriations provided by Higher Education Act, LSCA, ESEA, and related acts, plus Revenue Sharing funds allocated by both states and localities. Nixon, she said, used his RS plan "as an excuse to zero out money earmarked for libraries," but RS "theoretically" was not supposed to replace regular appropriations. She predicted that this new and separate funding will continue to support library services. As for the future of the categorical and program, Case noted that last year Congress amended the Higher Education Act, thus providing funding from that source for five years. LSCA was amended in 1970, and Congress will have to decide whether or not to extend it by June 30 of 1976.

She pointed out that the current appropriations bill does not provide money for library construction, but she noted that some $15 million in impounded funds covering library building is to be released to the states. Many states and localities, incidentally, have allocated large chunks of RS funding for one-shot improvements like library buildings.

The current appropriations bill contains a provision whereby Nixon can cut total appropriations by $400 million; but any single appropriation or program can get no more than a five percent cut, and those programs which do not exceed the President's budget cannot be axed at all. What follows is a rundown of funds appropriated for various library programs—appropriations which can be reduced by only five percent. Under the Elementary and Secondary Education Act, $1,810,000,000 has been allocated for educationally deprived children; $95,000,000 for school library resources and instructional materials; $146,393,000 for supplemental educational centers; $41,500,000 for state education departments, $50,000,000 for the education of handicapped children; and $53,000,000 for bilingual education programs.

Under LSCA, $46,479,000 is to go for library services and $2,730,000 for interlibrary cooperation. National Defense Education Act appropriations include $30,000,000 for equipment and minor remodeling and $13,360,000 for language development.

Under the Higher Education Act, $15,000,000 is to go for the community service program; $10,500,000 for college library resources; $3,000,000 for library training, and $1,500,000 for research. Also $8,098,346 has been earmarked for the Library of Congress' Acquisition and Cataloging. $99,992,000 for developing institutions, $2,100,000 for fellowships, $12,500,000 for undergraduate equipment and materials. Subsidized loans for higher education facilities amount to $31,823,000.

Other appropriations include the sum of $75,000,000 for the National Institute of Education, $10,000,000 for the Postsecondary Innovation Fund, $3,000,000 for State Postsecondary Commissions, and $12,000,000 for the Right to Read program. These amounts have been allocated for Older Americans Act programs: $68,000,000 for community programs and $10,000,000 for training. Money available in state grants under the Adult Education Act totals $56,300,000. $16,500,000 will go to ETV (educational television) facilities. $25,871,000 under the Medical Library Assistance Act, including an allocation for the National Library of Medicine: $4,226,750 for the National Agricultural Library, finally, $82,371,150 for the Library of Congress. $406,000 for the National Commission on Libraries and Information Science, and $36,471,000 for the Superintendent of Documents.

National Book Committee Moves Director Jack Frank reports the new address 1564 Broadway, New York, N.Y. 10036 (at 47th St.) Phone (212) 575-1070

face. In its attempt at elegance and simplicity the "before" succeeds admirably; and, since most of the other pages are equally restrained in handling, they contrast with the ads admirably. Unfortunately their very paleness tends to make them a trifle dull; hence the introduction of the strong headline typography and the other color-creating rules, and the resultant compromise between the retained well-mannered paleness and the lively boldfaces.

The Checklist and People pages show how the pictures are pulled together and run as groups beneath the logos with the text run separately beneath. This makes the most of the available illustrations (grapes look like "more" in bunches than as individuals rolling around), and it makes page assembly much easier.

The Viewpoint page, a sort of outside editorial, uses the lower line of the logo as the top edge of its own box; the text is set in two-column measure to add that degree of importance that the pronouncement seems to deserve. See also the Editorial page on page 129.

LJ

NEWS

Publisher-library relations study planned by Indiana U.

The National Science Foundation has awarded a $117,000 grant to the Graduate Library School of Indiana University for a major study aimed at promoting publisher-library cooperation at the national level. The proposed study is one response to the widening rift between publishers and libraries now at odds over what rights and obligations are connected with copyright. Recent actions by publishers indicate a trend toward a stronger stand on the copyright question. Among them: the Williams and Wilkins suit against the National Library of Medicine, opposition by publishers to the cooperative acquisitions plans of the New York Public Library-Columbia-Yale-Harvard consortium, and the outspoken recommendations of the Authors League of America for a successor to L. Quincy Mumford as Librarian of Congress.

Dean Bernard Fry, who heads up the Indiana investigatory team, noted that unless a basis for cooperative action is worked out now, "libraries and publishers are likely to take unilateral actions that will commit them to adversary roles which can only harm the entire communications system." Publishers, he noted, are raising their subscription rates by 15 to 20 percent annually, and libraries, consequently, are cutting back on journal buying and relying increasingly on interlibrary shared resources.

Said Fry, cooperative library arrangements aimed at cutting acquisitions costs "could have quite serious side effects on the unstable economic mechanism which has allowed the publishers of...research journals to maintain a narrow margin of economic viability". These publishers are seeking alternatives to the print format, but "the traditional journal remains the most widely used tool offered by the present system for the storage and communication of scholarly and research information."

The Indiana study on the "Economics and Interaction of the Publisher-Library Relationship in the Production and Use of Scholarly Journals," will be undertaken by an advisory committee representing learned associations, university presses, professional society publishers, commercial publishers, libraries, the Center for Research Libraries, and the Federal Library Committee. Becker and Hayes, Inc. has subcontracted to assist the study team in gathering and analyzing data.

The researchers plan to propose within a year "joint actions aimed at achieving cooperative and reasonable results agreeable to all involved communities." In addition to identifying relevant practical and legal problems, the study team is to "recommend changes of an institutional, organizational, and philosophic nature that must be brought about in order to create the kind of environment necessary for a direct attack on the broad systems planning problems that lie at the heart of the matter."

Choices for new LC librarian named by ALA & Authors League

Looking to the retirement of L. Quincy Mumford as Librarian of Congress, the American Library Association has named its candidates for this post. They are: Page Ackerman, university librarian, University of California, Los Angeles, Lillian Bradshaw, director, Dallas Public Library, Charles Churchwell, associate provost, Miami University, Oxford, Ohio, Keith Doms, director, Free Li-

Streaking in Michigan: Flint Public Library staffer Patti Price streaked in a library PR stunt, but the local paper later decided not to print the above pic

LJMAGAZINES

Bill Katz, PROFESSOR, SCHOOL OF LIBRARY SCIENCE, STATE UNIVERSITY OF NEW YORK, ALBANY

TRELLIS

ONE

British History Illustrated

1974 Kenneth, Ill. Ed. Rene Fox. Historical Times, Inc. Illustrations, Box 8074, Duke Station, Durham, N.C. 27707. Bi-mo. $18. Vol. 1, No. 1 (1974). 70p.

Here is a more modest version of the lavish *Horizon* type of publication devoted to a concentration on British history. Within its 65 heavily illustrated pages (black and white, as well as sepia photographs and line drawings) are four to five articles by experienced writers and historians. There are no footnotes and the magazine is particularly written for the educated layman or the expert. Still, the level of writing is sophisticated enough to authenticate and appeal to the academician and objective enough to maintain a fast "I was there" stylistic approach. The editor notes the magazine will cover the broad tapestry of British history, "from Roman Britain to Churchill, from the heartland of London and the Home Counties to the farthest colony over which the flag of Britain flew." Issues announced indicate the editor is quite catholic in his approach to subject matter. The earliest issue featured *Western Trails*. The latter is directed to the same audience, but is considerably broader in its scope. In view of the writing style, the fine illustrations and the obvious specialization of its contributors, *British History Illustrated* is highly recommended for all libraries. *BR*

Maire Power International

1974 Quarterly. Ed. Gerard Stanton. Box 29, Fort Bragg, Calif. Quarterly. Canada, Box 4040, Fort Erie, Ontario. Publisher Maire. Issue reviewed Vol. 1 (1974).

A speculative lobby magazine for the Irish or women interested in reunification of the world. (The 72 pages is at its way station.) Issue one has a fine collection of features material on origins from England and abroad. There are three to four articles and statistical information on various types of engines. A few black and white photographs. Somewhat similar in purpose and scope to *Transit and Rail* road Magazine, although more emphasis here is on the locomotive. As one says, the railroad fan will want to rush a subscription to this as well as involved librarians. *BR*

Rail

1974 Quarterly. Ed. Jonathan Eisenstadt. $8.00. Mitchell Wolfson Jr. Rail Project, 525 Northeast 4th Ave., Fort Lauderdale, Fla. 33301. Vol. 1, No. 1 (1974). 64p. Publication schedule: Spring, Summer, Fall, Winter.

A well printed and edited effort for new writing from both the United States and Europe (One of the editors lives in Paris.) Probably of most interest for translations of hereto-fore little represented writers in the English language, including Paul Celan and Georges Bataille's *Blue of Noon*. Issue one has a fine collection of poetry and prose. Should be much more than a trash of the traditional literary magazine. A good addition for college academic collections and a title to watch for years ahead. *BR*

Small Press Book List

1974 Bimonthly. Ed. Robert B. Mely. Box 100 Yellow Springs, Ohio 45387. $5.00. Vol. 1, No. 1 (1974). 16p.

This may be a long-needed book through for both librarians and small magazine and publishing buffs. Issue one has a fine collection of reviews of books made available by the support of staff respected by the editor, Richard Kostelanetz and Jim Morrisey. Every other month you'll receive a listing of 6-12 books, each annotated and encyclopedic and chosen to represent the best of the small press scene. And chosen by authorities. Every other mailing will include a "mag-bag" containing of three to four little magazines. Should be fun. Should be useful. Should have some selectivity from the small press world, this is an ideal route. The names of the advisors, and the commitment represented by advertising criteria already signed, assure that this will last. All librarians should get on the mailing list without delay. Save one "mag bag" a year will give you a sampling, and once the reader's mind you'll find it one of the most useful of the many publications coming today. Not only recommended, but required. *Don Dorrance, South Milwaukee Public Library, Wisconsin*

Trellis

1974 Spring/Summer. Ed. Jeffrey Skinner. $3.00. Box 339, Morningside Station, NY 10027. Vol. 1, No. 1 (1974). 64p. Publication schedule: Spring, Fall.

A well printed and edited effort for new writing from both the United States and Europe (One of the editors lives in Paris.) Probably of most interest for translations of heretofore little represented writers in the English language, including Paul Celan and Georges Bataille's *Blue of Noon*. Issue one has a fine collection of poetry and prose. Should be much more than a trash of the traditional literary magazine. A good addition for college academic collections and a title to watch for years ahead. *BR*

Small Press Book List

1974 Bimonthly. Ed. Robert B. Mely. Box 100 Yellow Springs, Ohio 45387. $5.00. Vol. 1, No. 1 (1974). 16p.

This may be a long-needed book through for both librarians and small magazine and publishing buffs. Issue one has a fine collection of reviews of books made available by the support of staff respected by the editor, Richard Kostelanetz and Jim Morrisey. Every other month you'll receive a listing of 6-12 books, each annotated and encyclopedic and chosen to represent the best of the small press scene. And chosen by authorities. Every other mailing will include a "mag-bag" containing of three to four little magazines. Should be fun. Should be useful. Should have some selectivity from the small press world, this is an ideal route. The names of the advisors, and the commitment represented by advertising criteria already signed, assure that this will last. All librarians should get on the mailing list without delay. Save one "mag bag" a year will give you a sampling, and once the reader's mind you'll find it one of the most useful of the many publications coming today. Not only recommended, but required. *Don Dorrance, South Milwaukee Public Library, Wisconsin*

LJCHECKLIST

Libraries & the disadvantaged

The Office for Library Service to the Disadvantaged of the American Library Association has published a bibliography entitled *Library Services for Children from Low Income Households* by Lois Slavin Mitchell and Jean Spealman Greene. Copies of the 36-page publication are available for $1.00 each from the Office for Library Service to the Disadvantaged, American Library Association, 50 East Huron St., Chicago, Ill. 60611.

Library service for the deaf

Library Services with Deaf People, a Guide to Concepts, Content and Resources is a publication of the Virginia State Library. Based on a workshop held at Gallaudet College, Washington, D.C., it discusses and concepts taken from the workshop. Additional information is needed for libraries in Virginia, but the ideas can could be applicable to other areas. The information is arranged under such headings as disabilities, problems, solutions, plan of action, and resources. Copies are available upon request to Consultant for Special Library Development Branch, Virginia State Library, Richmond, Va. 23219.

Northern Journeys

1973 Semi-annual. Ed. M. Nicholas Lathan. Price: $10. Box 1027, Norwood, Ontario, Canada. Publisher Norwood Publishing Co. Vol. 1, No. 1 (1973). 64p. Publication schedule: Spring, Fall.

The Canadians seem to be enjoying a real outpouring of little magazines, three of which are surprisingly high in quality. Issue one of this publication has a fine collection of excellent graphics, photographs, prose, poetry, and essays, primarily by the youngsters creative writers. Using autobiographical material prose is combined with the veteran George Woodcock, as well as with the unknown. Should be a good addition for college collections and a title to watch for years ahead. *BR*

Soviet public health plan

The Soviet Five-Year Plan for Public Health 1971-1975 was prepared under the auspices of the Public Health Committee of the Academy of the Republic International Science. It tells how the Soviet Union has sharply reduced infectious diseases and has improved the overall health conditions of its citizens. Copies of the 32-page publication, Publ. No. 1974-0-538-109, are available for 75¢ each from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

On dentists

The Mystery of Dentists is a new publication of the Department of State, and one of its General Foreign Policy Series. Based on a report prepared by the Bureau of Intelligence and Research, it tells how dentists in this booklet briefly explains dentistry relations of interests as they exist between the Union and the United States. It touches on its professional ethics, its training, its social accomplishments, and its impact on anthropology and organizations. The full text of the Soviet-American Agreement. House of Representatives on dentists will be published early in 1974. Copies are available for 35¢ each from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

1974 standards catalog

The 1974 Catalog of the American National Standards Institute (ANSI) lists more than 5000 American National Standards, more than 1000 international standards and recommendations, and 1000 publications which have been approved through December 31, 1973. The international standards are those received by ANSI from the International Organization for Standardization. Item the International Electrotechnical Commission or from the International Commission on Rules for the Approval of Electrical Equipment. The catalog also lists special publications dealing with various aspects of standardization such as building construction, consumer goods, and health. Copies of the catalog are available from American National Standards Institute, 1430 Broadway, New York, N.Y. 10018.

Consumer finance

Voluntary Funds Liquidated 1974 contains the latest facts about consumer financial behavior as they are reported to the Federal Reserve Board by the 28 Cross Section Survey conducted by the National Consumer Finance Association. Washington D.C. This book is designed as a convenient reference source for the latest facts and figures on consumer finance and consumer behavior. Information is provided on population, family characteristics, consumer income expenditures, savings, and the use of credit by consumers. Copies of the 32-page publication, for the balance of the year. Copies are available from the National Consumer Finance Association, 1000 16th St., N.W. Washington D.C. 20036.

Transportation Policy

The Mystery of Dentists is a new publication of the Department of State, and one of its General Foreign Policy Series. Based on a report prepared by the Bureau of Intelligence and Research, it tells how dentists in this booklet briefly explains dentistry relations of interests as they exist between the Union and the United States. It touches on its professional ethics, its training, its social accomplishments, and its impact on anthropology and organizations. The full text of the Soviet-American Agreement. House of Representatives on dentists will be published early in 1974. Copies are available for 35¢ each from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

1974 standards catalog

The 1974 Catalog of the American National Standards Institute (ANSI) lists more than 5000 American National Standards, more than 1000 international standards and recommendations, and 1000 publications which have been approved through December 31, 1973. The international standards are those received by ANSI from the International Organization for Standardization. Item the International Electrotechnical Commission or from the International Commission on Rules for the Approval of Electrical Equipment. The catalog also lists special publications dealing with various aspects of standardization such as building construction, consumer goods, and health. Copies of the catalog are available from American National Standards Institute, 1430 Broadway, New York, N.Y. 10018.

Consumer finance

Voluntary Funds Liquidated 1974 contains the latest facts about consumer financial behavior as they are reported to the Federal Reserve Board by the 28 Cross Section Survey conducted by the National Consumer Finance Association Washington D.C. This book is designed as a convenient reference source for the latest facts and figures on consumer finance and consumer behavior. Information is provided on population, family characteristics, consumer income expenditures, savings, and the use of credit by consumers. Copies of the 32-page publication, for the balance of the year. Copies are available from the National Consumer Finance Association, 1000 16th St., N.W. Washington D.C. 20036.

Transportation Policy and the New York Era

Transportation Policy and the New York Era comment is a recent publication of the Council on Transportation, 1974. Copies are available from the Council on Transportation, 1 Penn Plaza, Suite 1600, Empire State Building, New York City 10001. Price: $4.00. Checks should be made payable to the Council on Transportation.

LJLETTERS

F. MIGAS

W. RUDEWAVA

J. SPEALTINO

C. SHAW

JEAN ANDERSON, formerly Library Manager, Cross Section Research and Development Company, Cranberry, N.J., has been appointed Associate Librarian, University of South Florida, Fort Myers Educational Center Library, Fort Myers.

ELIZABETH ANN BARTHOLOMEW, formerly on the staff of the University of Pennsylvania and Washington University Libraries, has been appointed Associate Academic and Research Librarian at the Bureau of Academic and Research Libraries, New York State Library, Albany.

VIVIAN T. BROWN, formerly assistant in the Young Adult Coordinator, Nassau Library System, Uniondale, N.Y., has been appointed Young Adult Consultant in the Programs and Services Department of the Queens Borough Public Library, Jamaica, N.Y.

SUSAN T. BURTON, formerly Bibliographic Searcher, Pacific Northwest Bibliographic Center, University of Washington, Seattle, has been appointed Reference Librarian, Undergraduate Library, University of Texas at Austin.

JOHN CAMPANELLI, formerly Head of Technical Services, Columbia State College, Stanislaus, has been appointed Director, Bethlehem Memorial Library, Augustus College, Rock Island, Ill.

VIRGINIA CLARK, formerly Editor of ALA's *Books for College Libraries*, has returned to Chicago magazine. He has now joined Booklist as Associate Editor, she will be responsible for editing the magazine's coverage of reference materials and guide-writing courses.

PAUL CLINE, formerly Librarian of the Plainview-Old Bethpage High School Library, New York, has been appointed Adjunct Assistant Professor at the Queens College Library Science Department, Flushing, N.Y.

P. GILLIS DESANTIS, formerly Coordinator of Extension Services, Montgomery City-County Public Library, Alabama, has been appointed Director of MCLTS.

PAUL E. DUNNEY, formerly Systems Librarian, San Antonio College, Texas, has been appointed Chief of Materials Processing, Dallas Public Library.

DON W. FOSTER, Librarian of Bates College, Lewiston, Maine since 1951, has retired after 40 years of service at the college library.

GERALD GARDNER, formerly manager of technical services at the Cecil Catalog Corporation, Philadelphia, has been appointed Assistant Librarian, Division Manager for Technical Services at the Birmingham Public Library, Edina, Minn.

EMMETTE GOLLIHER, formerly Associate Director of the North Carolina Union Catalog Systems Manipulator, has been appointed Assistant Librarian, Duke.

JOSEPH HELLER, formally with the Columbia University Department of Information Services, has been appointed Associate Editor of the Columbia University Press, New York.

CATHRYN HOGAN, formerly Head of the Department of Public Services, Schaumburg Township District Library, Ill., has been appointed Information Librarian, North Suburban Library System, Wheeling, Ill.

THOMAS JAMES, formerly Personnel Consultant, Western Library Consortium, Salt Lake, has been promoted to the post of Assistant Library Association in 1945.

RICHARD KOSS, Director of the Milwaukee Public Library, Wisconsin, has retired.

GERALDINE LIBBY has retired from the post of Library Director, Savannah Public and Chatham County Library, Georgia, after 30 years of service.

JAN E. LITTLER, formerly Associate University Librarian at Potomac University, New Jersey, has been appointed Director of Libraries at the Massachusetts Institute of Technology, Cambridge.

DONALD W. LOVEJOY, formerly Assistant Librarian, Williams, Wisconsin, has retired.

LOIS MACHAN, formerly Management and Administrative Consultant, Mississippi Library Commission, Jackson, has been promoted to the post of Assistant Director of Administrative Services.

BARBARA B. MAC, Director of the Bethlehem Public Library, Delmar, New York since 1953, has retired.

MICHAEL H. MCGREGORY, formerly Assistant Librarian, UK Military Academy, Fort Jackson, has been appointed Assistant Librarian, Collection Development and Technical Services.

C. SCHWAB SPALDING, has retired as Assistant Director (Cataloging) of the Processing Department, Columbia University Libraries. He had been with them since 1966. His career at LC started in 1940. Among the posts held: Chief of the Cataloging Maintenance Division, Chief of the Serial Record Division, and Chief of the Descriptive Cataloging Division. Spalding was also the general editor of the Anglo-American Cataloging Rules.

DANIEL VANCHERI, formerly Assistant State Librarian, Sacramento, has been appointed Head Librarian. He has been appointed Head Librarian and Executive Director, Pennsylvania and first chief librarian with a whole new carrier the confluence of institutions into regional performance. Some librarians may disagree, but that I edited the magazine since the first.

Elsported NOW

Carol Sawyer
Library Technician for Women in Society, Chicago

I am thoroughly impressed with your Ideas shot at NOW in the *LJ Hotline*, June 15 p. 2. You should get your facts straight before commenting on out policies.

The facts are these NOW directorate, between its affiliates, although each action which serve to maintain women's dependent status in society. Some of the actions mentioned above which lead to break up the participation in the Democratic national convention.

Volunteer labor for social service is an extension of unpaid household labor. Humanitarianism for some on the backs of others ends. So, being employment. The volunteer system reinforces economic dependence of women by preventing the majority from earning money of her own. Refer to the Women's Bureau of the Labor Department available from NOW, 5 North Wabash, Chicago, Ill. 60602.

As a professional librarian I am appalled at the exploitation of women by librarians. If the Bloomberg District Libraries women volunteers (!) are paid (if paid at all) as low as 50¢ a hour for 20 hours a week. This can come out of overhead, but certainly not out of salaries of professionals. Some women volunteers have worked as long as ten years at this low wage. And of course, these are by and large women who have family responsibilities, etc. Have you ever considered this aspect of the volunteer movement?

I could go on for pages but I think the point is clear enough. NOW recognizes the importance of pay for volunteers, but more important is the recognition that volunteers (especially in libraries) are used to pick up the slack in government negligence or as the organizations fund-raising arm. Many of these women are educated by professionals, funds have been cut, and social responsibilities are challenging tasks.

NOW and the dollar

Lillie Nemiller
Head, Social Sciences Dept., Hunter College Library, New York City

Miss Simpson's previous against the state of the Union (*LJ*, 1/74) and the assertion I quoted on *LJ Hotline* that women should not engage in volunteer work. Some of the work is worth doing; it is worth being done well. Women have been exploited by NOW. Have not thought out the results of their actions. Have not done their homework. Have not done enough research. Have not prepared for the welfare of others. Have not been a member of the Democratic national convention. Have not been a member of the Democratic national convention. Have not been a member of the Democratic national convention.

Perhaps the officers of NOW have received many letters from women who have come from volunteer work, from doing work that should be paid, from being exploited, and the two and that comes from the volunteer system. Some of these are the thoughts of everyone. Many librarians in the country were started and manned by volunteers until funds could be found to pay trained workers. Still much of the work in libraries, does not require any special training and volunteers can be very helpful. Realistically our volunteers in great advantage and I have heard discussions by librarians who considered them no better than the regular paid workers. Schools are now also using the volunteers. Schools of workers are to achieve their goals with them, should not be deprived of the rewards and satisfactions that come with volunteer work.

Book take set

Marvin H. Scilken
Director, Health Sciences Communications Center, Downstate Medical Center, Brooklyn, New York

I'd like to protest the elitist attitude in Bill Katz's Reviews of the National Year (*LJ* June 15 p. 1867). The National Year is the most innovative of a library that the National Enquirer or for that matter *The Readers Digest* but the sorry fact is that it is not read by most of these people. A part of their reading may need to be in a more popular format and I am sure that librarians should be in the forefront of developing such materials.

Any research that I have that libraries should not have much with anything popular with the book take set' crowd. Of course, if this happened to be material in which the librarian of the National Year I have not have had useful information. Because of a popular material in bibliography all librarians that wants to be of service to the public should have it.

I have felt that we have made a mistake as libraries because this denies or excludes to almost the Reader-outside (or we have a we really don't want it—and we've gotten what we deserve. It seems to me that librarians should love serve the public and not be passing about for other groups to serve.

Freeze-dried books

Frank C. Sutrina
Director of Technical Services, Lehigh University Library, Bethlehem, Pa.

Re: Preservation of Deteriorating Library Materials, Conference Report, *LJ*, December 1 1973 p. 3491. January 15 p. 127. Re: Freeze-dried books. Librarians are reporting on the success of the freeze-drying process at the Library of the Temple University Law Library. The librarian's profession has had the benefit of the opinions of these experts, none of whom have examined the materials which were salvaged. I understand that a conservation conference has been held using the results of the Temple University Law Library experience as a basis of discussion. Librarians are causing about the need of disaster. The librarians would be advised to attend the conference when

BOOK REVIEW

The Contemporary Scene

Bertrand Jouvel. **The Future of Motherhood.** Trans. from the French by Noël Burch. 256 pp. New York: Dial Press. $5.95.

Another fine contribution from the prolific sociologist/social philosopher and futurist. As Bertrand dissects the multitude of social trends affecting motherhood, he points out the many ways in which these presumed women's liberation movements are crippling mothers and challenging the myth of the "motherhood instinct." The current disregard report on any new variable or trend in human behavior, he maintains, that are inquisitively used and exaggerated, and such issues as the emergence of cellophane tape, the role of the workpad in working-day care centers, etc. are clearly documented. Jouvel's basic premise is that we should be read by those concerned with parenting and with the emergence of new role definitions. *Roger W. Libby, Institute for Family Research & Education, Santa Barbara, Calif.* ✓

Gentleman, Susan & Janet Markowitz. **The Complete Divorce.**

A & S. 174p. (No ISBN) index. LC 74-9647. $7.95.

Not a do-it-yourself guide but a vital book for coping with divorce problems, but rather a philosophical survey of the obstacles to divorce (and of the need to overcome them). The authors argue that a clear divorce is better than a bad marriage. The authors, both clinical social workers, discuss the longstanding belief that the nuclear family is sacrosanct, then examine the ways in which society discourages the child of divorce, asserting instead that the child may be hindered by exposure to an unrelated environment in the stepfamily. From experience, they also discuss the problems of the divorced parent (the "ignore the marriage strategy," opposing bias in the guise of treatment). A brief section is devoted to the history of divorce in the Hebrew and Roman cultures and in the Catholic and Protestant faiths. Above all, the authors maintain that divorce is the responsibility of the individuals involved, not their marriage counselors. *Jessie Bernard, Pennsylvania State University.*

contemplating divorce; the book will best serve as a counsel to alleviate certain unbalanced guilt feelings and to support the search for alternative life styles. *Ruth E. Alexander, North Carolina Girls Guild, Burnt Mill.*

Kane, Paula & Christopher Chandler. **Sex Objects in the Sea.**

Index. (no ISBN) 64p. $3.95 paper. $7.95 cloth.

A sickening antidote to the "Coffee, Tea or Me" school of thought. This angry book examines the workaday routines by which the sea industries exploit the sex appetites as sweetening gimmicks of the Technological Age; the humiliation she endures at the hands of air rig cooks as well as the very real dangers she faces from underwater predators. From the industry's lanky lunch hauls to unemployment of such flight attendants and passengers, etc. The book is well backed with statistics and case histories and achieves an added personal dimension in its own. Kane's description of her own metamorphosis from the airborne Barbie Doll to the sea-going Ms. Aquarius is itself an indictment that has got and must not weaken as confrontations, general conditions will vary. *Patricia Goodrich-Lincoln P.E.I., Toronto, Canada.*

REFERENCE

Private Encyclopedia.

(continued from p. 1) ...ing of the W. Annals & when they are ...ing.

Originally intended to serve as a general reference work for the family library, the volume will also be of great value to American students and to teachers of American studies. The articles cover a broad range of topics, both current and historical, and the writing is generally good. Articles are of a more earth complexion, due to secondary school students. A good index and a subject guide complete the material with photos and maps. This most welcome addition is the first volume of reference books in Africa to receive the Standard Book Award from the Children's Book Council. *Nancy Marie Patterson, University of Wisconsin, Eau Claire.*

Chamberlain, Jay R. & Jean S. Quiring. **Career Guidance Activities for Counselors and Teachers.** Houghton Mifflin. 1974. 256p. (No ISBN) index. LC 73-19780. $6.95.

Jay Chamberlain is a counselor educator at Ohio State University and Jean Quiring is a counselor at Columbus East High School. Both have had experience in developing career guidance activities for students. Their book is a collection of these activities, which are grouped into chapters on career awareness, career exploration, career decision-making, and career planning. Each activity is described in terms of its purpose, the grade level for which it is appropriate, the time required, and the materials needed. Directions for carrying out the activity are then given. Many of the activities are accompanied by worksheets that can be duplicated. The activities are generally appropriate for junior high school students, although some could be used with high school students. Most of the activities are designed for use in a classroom setting, but some could be used in a counseling situation. *Jeffrey P. Prince, Ohio State University.*

Hamilton, William & Edward Fenton. **Poets and Performers of Great Britain: Tennyson to Dylan Thomas.** Crowell. 1974. 214p. (No ISBN) index. LC 73-19780. $6.95.

Fitter, Edward A. **A History of Gorillas as a Captive Species.** 1968. 400p. (No ISBN) index. LC 68-56. $12.50.

Grossman, Charles, Jr. **My Autobiography.** Exposition. 1974. 160p. (No ISBN) index. LC 73-20780. $7.95.

Ian Saint Ives. **Dr. Philosophicus & Uncle Ian.** Exposition. 1974. 160p. (No ISBN) index. LC 73-20780. $7.95.

While discovering complementary, Christopher and Dorling have supplied an extensive bibliography of secondary source material, including the most important reviews of Lewis' masterpieces. Their introduction, which proclaims a cut-off date of 1969, is followed by a selected bibliography of primary sources and is broken with strong C.S. Lewis collections. The annotations are remarkably thorough and indicate a familiarity with the subject matter. This is a valuable addition to a growing section of literary criticism. *Jeffrey Prince, Ohio State University.*

Smith, H. Clifford. **Auxiliary Agriculture.** 1974. 417p. (No ISBN) index. LC 73-20780. $17.50.

BIOGRAPHY

Anderson, A. A. **25 Years in a Wagon.** reprint. 1888. 416p. (No ISBN) index. LC 73-20780. $17.50. Arno. 1974. 416p. (No ISBN) index. LC 73-20780. $17.50.

CONTENTS

The Contemporary Scene	2150
Reference	2162
Biography	2165
Business & Economics	2167
Communications	2150
Education	2160
History	2160
Mathematics	2166
Language Arts	2166
Literature	2036
Music	2166
Philosophy	2159
Religion	2159
Science	2166
& International Affairs	2161
Psychology & Psychiatry	2162
Religion	2164
Science & Technology	2165
Social Sciences	2168
Sports & Recreation	2172
Theater	2173
Fiction	2174
Book Review & Professional Reading Author Index	2179

Library Journal reviews are indexed in *Book Review Index* and in *Book Review Digest.*

BOOKS TO COME

383 Reprints To Be Published September 1, 1974—January 31, 1975

REFERENCE

Addington, Richard. *A Life of Lawrence D'H.* Lawrence & Wishart. reprint. Barn Press. Nov. $12.50

Child, Theodore. *Practical Cookery.* Cassell. reprint. and Dimensions. reprint. 1892. Hippocrene. New Revelations Press. Dec $25.00

Lessing, Doreen. *Planter's Executor.* Cassell. reprint. 1891. Hippocrene. New Revelations Press. Dec $25.00

Mayer, Frederick. *Interpreting New Testament Times.* Abingdon. 1918. reprint. of 1905 ed. illus. index. Gale Sept $10.00 LC 73-17780

Moore, Francis & others. *Old Mexico.* Cassell. reprint. 1903. Hippocrene. New Revelations Press. Dec $25.00

Paine, James & others. *Elements of Rhetoric.* Cassell. reprint. 1866. Hippocrene. New Revelations Press. Dec $25.00

Pitman, William & Edward Fenton. *Poets and Performers of Great Britain: Tennyson to Dylan Thomas.* Crowell. Nov. $6.95

Price, Edward A. *A History of Gorillas as a Captive Species.* 1968. 400p. (No ISBN) index. LC 68-56. $12.50.

Spencer, Charles, Jr. *My Autobiography.* Exposition. 1974. 160p. (No ISBN) index. LC 73-20780. $7.95.

Ian Saint Ives. *Dr. Philosophicus & Uncle Ian.* Exposition. 1974. 160p. (No ISBN) index. LC 73-20780. $7.95.

Thompson, Vincent P. *Life of Lord Cochrane.* Cassell. reprint. 1869. Hippocrene. New Revelations Press. Dec $25.00

Wells, Lena & Annette K. Baxter. *Mississippi Autobiography.* reprint. Abingdon. Nov. $10.00

Wilson, T. G. *Victorian Doctor.* Irving Cassell. reprint. 1942. Hippocrene. New Revelations Press. Dec $25.00

BIOGRAPHY

Carpenter, Edward. *E. M. Forster and Other Friends.* Cassell. reprint. 1934. Hippocrene. New Revelations Press. Dec $25.00

Campbell, John. *Friends in Power.* Cassell. reprint. 1911. Hippocrene. New Revelations Press. Dec $25.00

Hammond, John Hays. *The Autobiography of John Hays Hammond.* Irving Cassell. reprint. 1935. Gale Historical & Economic Aspects. Nov. $25.00 LC 74-1

Lawrence, Frieda. *Not I, But the Wind.* reprint. 1934. Barn Press. Nov. $12.50

Lawrence, Frieda. *Not I, But the Wind.* reprint. 1934. Barn Press. Nov. $12.50

Pearson, James, & others. *Elements of Rhetoric.* Cassell. reprint. 1866. Hippocrene. New Revelations Press. Dec $25.00

Pitman, William & Edward Fenton. *Poets and Performers of Great Britain: Tennyson to Dylan Thomas.* Crowell. Nov. $6.95

Price, Edward A. *A History of Gorillas as a Captive Species.* 1968. 400p. (No ISBN) index. LC 68-56. $12.50.

Spencer, Charles, Jr. *My Autobiography.* Exposition. 1974. 160p. (No ISBN) index. LC 73-20780. $7.95.

Thompson, Vincent P. *Life of Lord Cochrane.* Cassell. reprint. 1869. Hippocrene. New Revelations Press. Dec $25.00

Wells, Lena & Annette K. Baxter. *Mississippi Autobiography.* reprint. Abingdon. Nov. $10.00

Wilson, T. G. *Victorian Doctor.* Irving Cassell. reprint. 1942. Hippocrene. New Revelations Press. Dec $25.00

fiction

Conn, Max, the Good Guy. reprint. Nash. Sept. $7.95

Conn, Norma. *Alexander.* reprint. 1930. Barn Press. Nov. $12.50

A page of short items organized about a central spine

This is a page typical of some half dozen such short-item report pages packaged under different headings. The "before" version, at right, shows the way in which the items used to be imposed on the page: somewhat lackluster fashion in spite of the second color headlines. It is a perfectly acceptable solution, workable, simple, easy to live with on an issue-to-issue basis, but it is a bit unimaginative.

The "after" calls for no substantive changes in the items or the way they are written, though widening the column width and allowing greater column height allows two or three extra items per page. The only difference: the makeup man shifts the headlines in the left-hand column to a flush-right position and rules above each headline that appear to grow out of the double-line vertical spine are inserted. The logo and the spine are standing artwork.

The folio and footline are centered and act as visual echoes of the centered logo at the head of the page.

At far right is a version of this page squeezed into a vertical two-thirds space.

OUTLOOK | WORLD BUSINESS

Forecasting world production and trade

An international team of economists is putting together a system or model to forecast trends in international trade. Called Explor Multitrade, it will consist of data—such as a forecast of production, consumption, government spending, prices, costs, profits, investments, labor, foreign trade—of 50 to 80 industries of 10 countries which, collectively account for two thirds of the world's trade. They include Belgium-Luxembourg, Canada, France, Germany, Italy, Japan, the Netherlands, Spain, the U.K. and the USA. The research program is being worked on by Batelle's Pacific Northwest Laboratories (Batelle Blvd., Richland, Washington, A 99352). Forecasts are now available for these countries for the years 1975, 1980 and 1985.

Data bank on new products and patents

Subscribers to Patindex, a new product information service, receive a computerized printout of what's new in about 250 major product categories covering 17 industries in 21 countries. The printout describes a product or process, its stage of development, patent status, countries available for licensing and whether a joint venture or knowhow agreement is required. Subscribers specify their area of interest. Cost is $500 a year. For details, write to Patents International Affiliates 540 Madison Ave., New York, N.Y., USA 10022.

High oil bills for this year

Major oil consuming countries will need considerable sums to pay for their imports of the fuel this year. For example, Japan's bill will come to $11,000 million, $33,000 million for Europe's Common Market countries, and $10,000 million for the U.S. Where will some of them get the money to pay? A high level delegation of Japanese industrialists and bankers who visited the U.S. this month said that Japan must intensify its export drive to pay for the oil. But it will not be as aggressive as in past years. The constraints they cite are: shortage of raw materials, rising concern over environmental pollution, and pressure from overseas countries for Japanese companies to manufacture right in consuming countries.

IRELAND: Big alumina plant at Shannon

Alcan Aluminum Ltd. of Canada will construct a $230 million, 800,000 metric tons a year capacity alumina plant on a thousand acre island in the estuary of the Shannon River, opposite Shannon airport. Construction begins this year and production is scheduled by 1978. Most of the bauxite will come from West Africa. The ingots will be exported to Britain and Europe. The plant will be operated by Alcan Ireland Ltd., a new subsidiary owned 70% by Alcan, 20% by A/S Ardal OG Sunndal Verk of Norway, and 10% by Granges Essem AB of Sweden, both Alcan affiliates.

BRAZIL: Growing use of powder metal

Markets are expanding at a fast rate for powder metal (PM) parts. The automobile makers, especially Volkswagen do Brasil, are the biggest users. So are the manufacturers of sewing machines, motorcycles, bicycles and appliances. The industry consumes 1,200 metric tons of iron powder a year and 300 metric tons of copper powders, mostly imported from the U.S. and Europe. There are four PM companies and two in-plant operations which make PM parts for shock absorbers and sewing machines.

SPAIN: Ford's Valencia plant begins work

Bulldozers have leveled 500 acres of the site for Ford Motor Co.'s main assembly plant, a $500 million investment that will be turning out 250,000 cars a year by late 1976. Almost half of the components of each car will be imported by Ford but two thirds of the plant's output will be exported. The facility is situated at Almusafes, some 12 miles from Valencia.

TAIWAN: Manufactured goods main exports

Unlike most Asian countries whose main exports are primary products or agricultural goods, Taiwan's total exports last year were 92.6% industrial, according to the Ministry of Economic Affairs. They totaled $4,140 million. Big export gains were in products such as bicycles, plastics, electric machinery and metal products.

APRIL 1974

7

WORLD BUSINESS TRENDS

Europe to use more minicomputers

Over the next ten years through 1984, the use of minicomputers in Europe will increase 60-fold, from a $10 million level last year to an estimated $600 million. The largest potential market will be in production control applications where the units will replace existing hard wired controllers, according to a market study by Frost & Sullivan, Inc. of New York. Process industries and utilities will also take up big shares of the industrial control market. The study finds that France, Germany and the U.K. will account for two thirds of European minicomputer usage. While U.S. products now dominate the market, European and Japanese minicomputers are now becoming available.

Saudi Arabia plans to industrialize

Buoyed by oil revenues estimated at more than $30,000 million a year, Saudi Arabia has allocated about $100,000 million for big industrial projects. Over the next five years, these projects will include petrochemical, steel, gas, fertilizer, methanol and aluminum plants, among others. Other countries will be providing additional funds for 50-50 joint ventures, thus boosting total spending for the five-year industrialization drive to $150,000 million.

Chile rehabilitates industries

As part of a program to stimulate industrial development, Chile's National Economic Development Agency (CORFO) is granting $13 million worth of credits to large and medium sized industrial firms suffering from low productivity and in need of funds to modernize or diversify. Credits will also be granted to the building of new plants. The Inter-American Development Bank has loaned $10 million of the total costs of the program.

Timken Co. modernizes worldwide

The Timken Co. of Canton, Ohio, a U.S. major manufacturer of bearings, will be spending $60 million over the next five years to boost capacity, modernize equipment and build new plants in six countries where it now operates. These are in Australia, Brazil, England, Canada, South Africa and France.

Mexico makes its own stainless steel

An integrated stainless steel project, costing $83.6 million, will ensure Mexico a domestic supply of the metal. At present, the country imports all of its stainless steel products. To be built in stages at San Luis Potasi, between Monterrey and Mexico City, the initial phase will be the construction of a 40,000 metric ton a year cold rolling mill, followed by facilities for hot rolling and metal production. The financiers of the project are the Fundidora Monterrey S.A. Group, Pechiney-Ugine-Kuhlmann of France, the International Finance Corp., three Mexican companies and other local investors.

High prices slowdown use of nitrogen fertilizer

Eastern Europe is and will be the largest producer and consumer of nitrogen products through 1985. North America will continue to be the second largest ammonia producer, but will be surpassed by Asia in nitrogen fertilizer consumption. These are among the forecasts in a 41-country study, *World Nitrogen Supply & Demand*, prepared by Predicasts, Inc., (11001 Cedar Ave., Cleveland, Ohio, USA 44106). A copy of the study costs $375. It projects worldwide nitrogen fertilizer consumption to rise to 86 million tons by 1985, from 35 million tons in 1972. It notes, however, that in the past several years, fertilizer consumption has been slowed due to rising prices, capacity shortages, and lack of investment capital for expansion.

Oil pipeline along Panama Canal

A $100 million, one million barrel a day capacity pipeline running parallel to the Canal is being planned by the Panamanian government. It would carry oil from Ecuador, Peru and Bolivia for transport to U.S. and Caribbean ports. Terminals at both ends of the line will be able to handle 120,000 DWT tankers. Construction will take 18 to 24 months, and the pipeline could be opened by 1977, according to the government.

Romania wants MFN status from U.S.

Romanian-US trade could soar to $1,000 million by 1980 from the current $400 million a year level if the U.S. would accord most-favored-nation status to Romania, according to a joint-country trade study. Romania is ready to purchase $100 million worth of U.S. industrial goods as soon as this status is given. It is shopping around particularly for NC machine tools, foundry equipment, earthmoving machinery, cranes and shipyard equipment.

Jamaica readies new trans-shipment port

At a cost of $45 million, Jamaica hopes to transform Kingston into a major trade distribution center for the Caribbean on the scale of a Hong Kong, Beirut or Halifax. Phase one of the project, now nearing completion, consists of a 40 ft deep channel, 2,400 ft of ship berths served by four gantry type container cranes, each rated at 40 tons (two cranes now operational). Phase two is a 100 acre free trade zone contiguous to the port where manufacturers may set up assembly and other export-oriented plants, with the benefit of a 10-year, 100% tax holiday on profits. The new free zone is being promoted as an ideal distribution site because it is the center of shipping routes in the area, equidistant between North and South America, and located on direct trade routes through Panama between the Far East and Europe.

INDUSTRIAL WORLD: AUGUST 1975

INTERNATIONAL, LTD.
Foster Plaza 8700
Wood-Ridge, New Jersey
07075 U.S.A.
Tel. 201-777-2900
Telex 133-350

UNITED STATES
San Diego, California
Chicago, Illinois
Houston, Texas

UNITED KINGDOM
Woking, Surrey, England

EUROPE
Brussels, Belgium
The Hague, Holland
Rome, Italy
Hamburg, West Germany

MID AND FAR EAST,
PACIFIC AREA
Kuwait
Singapore
New Delhi, India
Auckland, New Zealand

WORLD BUSINESS TRENDS

Japan's exports to Middle East are up sharply

"We are spending most of our reserves on buying Arab oil, and we must try to get some of it back," a Japanese businessman told Nadim Makdisi, editor of the Arabic magazine *Alam Attijarat* during a recent trip to Tokyo. Japan's steel exports to the Middle East in the first three quarters of 1974 were 2.6 times that of a year earlier, while chemical exports were up 2.5 times. The decline of traditional markets in southeast Asia, Europe and America, have focused Japanese attention on the oil-rich lands. Numerous contracts have been concluded or are under negotiation for large scale industrial orders. By October of last year, the Middle East took 8% of Japan's exports compared with 4.7% a year earlier.

West Germans invest more in the U.S.

According to official West German statistics, that country's direct investments in the U.S. were $205 million in the first half of 1974—a sizable increase over the $136 million invested in all of 1973. This brought total West Germany investment in the U.S. to about $1,000 million compared with $6,000 invested by U.S. firms in Germany.

Continued expansion seen for ammonia fertilizers

An enormous increase is underway in production of ammonia fertilizer. During the past 10 years, approximately 150 large scale fertilizer ammonia plants (600 tons a day or more) have been put into operation or are now being built, the M.W. Kellogg Co. estimates. Most new construction centers on plants of 1,000 to 1,500 short tons a day. While this capacity range will continue in the near future, Kellogg feels there will also be interest in giant plants of 2,000 short tons a day and greater, associated with cheap natural gas feed—such as in the Middle East and North Africa. Kellogg also says that coal-based operations can be justified in locations where the unit cost of coal is low, where gas does not exist, and where the alternative is expensive imported oil, as in South Africa and India.

Taiwan Power Company to build third nuclear plant

Taiwan Power Company is planning to build its third nuclear power plant, which will have two generators with an installed capacity of 950,000 kW each. The generators are expected to be completed in March 1984 and April 1985. The company's two other nuclear power plants, both in northern Taiwan, are now under construction.

Brazil plans major expansion in steel capacity

Brazil's steel production capacity will grow from about eight million tons per year to over 22 million tons by 1979. Major expansion will be carried out by three government-owned mills—CSN, COSIPA and USIMINAS—as well as a number of smaller mills. The three major companies account for half of the steel produced in Brazil and for virtually all flat rolled steel. In December, the Inter-American Bank announced two loans totalling $103 million to CSN and COSIPA. The loan to CSN, for $63 million, will help it carry out a $1,600 million expansion program, which will increase capacity of its Volta Redonda plant from 2.3 million to 3.5 million tons per year by 1978.

3
INDUSTRIAL WORLD: FEBRUARY 1975

Several pages suspended from central axis

Here the problem is to make the most of a typical house organ news section with its many short items, some copiously illustrated and others just text reports; simultaneously, the problem is to avoid the typical three-column straitjacket that seems to be the only way to handle such material.

First decision: editorial judgment agrees that this section deserves good play, and that it therefore deserves enough space to do it justice.

Second decision: it is justified to "waste" one column out of the potential three-to-a-page, place the remaining two columns centered about a strong vertical rule, and encroach onto the extra-wide margins thus left over with long, outrigger headlines and with larger pictures.

The resultant freedom of makeup allows interesting-looking pages with ample variety that avoid appearing messy because of that strong structural central axis about which they spin.

14

The normal three-column page

14

arrangement

14

14

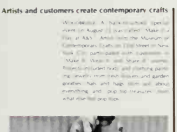
14

..... "wasted"?...

The central-axis modification "wasting" the marginal spaces but retaining the 14-pica text width (which makes it easy for typing the MS, setting the type, calculating required space etc).

Artists and customers create contemporary crafts

WOODBRIDGE. A hugely successful special event on August 23 was called "Make it a Play at A&S." Amid noise the Museum of Contemporary Crafts on 53rd Street in New York City participated with customers in "Make It Yours" and "Share It" events. Potters introduced skill and charting pacing the wealth, even basic lessons and garden weather hats and bags were sold after everything and prep for everyone from what else that you have.

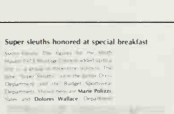


More employees schooled in emergency first aid

Hospitality. Participants in the class are shown here (clockwise) William Margen, Camera Mart; **Ronald Patell**, Security; Theresa Ennis, Nurse; **Ishtia Anganski**, Personnel; Carolyn Cox, **Harriet Demos** and Al **Opperman**, service supervisors; **Gloria Williams**, Earle Place; **Demetra Summa** and **Sarah Schor**, Service Supervisors.

Super sleuths honored at special breakfast

Secret Shoppers. The figures for the Ninth Annual A&S Mystery Shopper Program were announced at the May 31 breakfast honoring the Nine "Super Sleuths" from the Service Department and the Budget Department. Shown here are **Marie Polizzi**, Sales, and **Dolores Wallace**, Department Manager.



Manager Jaime Thomas and **Eva Petillo**, **Jackie Pachner**, **Bonnie Crofton**, all of Sales, **Paula Berger**, Assistant Department Manager, **Alice Fratarelli** and **Lilly Antzamidis**, Sales Budget Spokesman. The Bridal Department was also a June winner for the second time.

At the July "Super Sleuth" breakfast, members of each winning department received a corsage and a weekly lottery ticket. And the special three-time winners were awarded "super" corsages of carnations and roses and a chance at $1,000,000 — a special lottery ticket. After the breakfast, Assistant Store Manager **John Lloyd** praised the winners for their efforts to prevent shortage and wished everyone luck in the September lottery.

Teen board cooks out with cerebral palsy center

WOODBRIDGE. A&S Teen Board members held a One-to-One Cookout with the Cerebral Palsy Treatment Center on Edison, N.J. on July 12 at Roosevelt Park. The store sponsored the entertainment and distributed raffles for the benefit of the Treatment Center to Teen Board members. The prize, a ten-speed bicycle, will be awarded at a free concert in Roosevelt Park on September 5.

Before the cookout, Teen Board members visited the Treatment Center to learn more about how it operates and what services are provided.

Ands award captured by advertising department

A&S won one more off the big Manhattan national advertising awards parade as the department family shared in the fall classic paper campaign of 1975.

The silky-voiced 1200 of New York's 6th Ebb Annual Andy Awards program awarded Abraham & Straus a Bronze Award for the 1975 Christmas newspaper campaign series. It was one entry in a $1.2 million ad campaign in which A&S ranked in the top 10 retailers in the New York Advertising Department's classification.

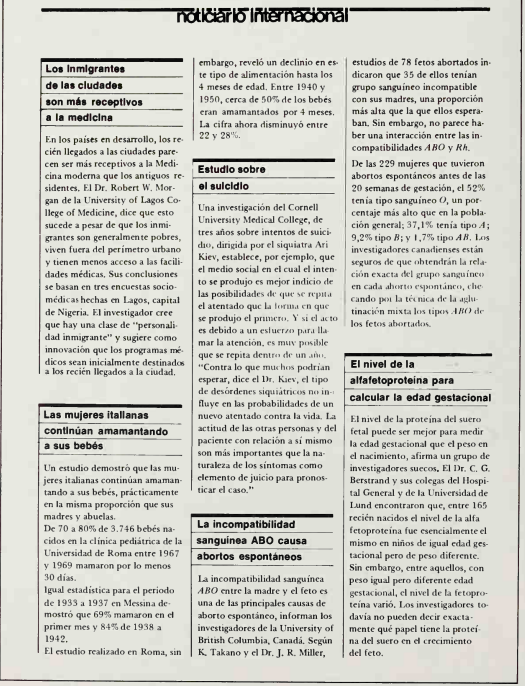
Earlier this year, the A&S Department earned the paper a theme that is fully outstanding merchandise presentations based on real women shopping styles. The theme was

Unitization of individual stories yields recognizable character

This example shows a perfectly simple three-column page — with a difference: each item is clearly defined in length, so each signals its start and its end quite clearly. (This is a useful attribute in increasing readership, for people like to read short pieces, especially when they see exactly how short they are.)

The headlines and text are actually set simply flush left and ragged right, with standardized spacing between the headlines and between the items. Superimposed over them are ruled grids, made from existing templates. The only variable: to make the vertical rule end flush with the last line of the item. The horizontal rules are, of course, calculated to coordinate with the line-by-line setting of the text, so that the complex-appearing makeup is, in fact, a perfectly simple laying-down of galley as it comes from the typesetting machine.

The grid (with variations for other situations in the magazine) becomes the recognition symbol of the departments, aided by the department headings, of course.


noticiario internacional

Los inmigrantes de las ciudades son más receptivos a la medicina

En los países en desarrollo, los recién llegados a las ciudades parecen ser más receptivos a la Medicina moderna que los antiguos residentes. El Dr. Robert W. Morgan de la University of Lagos College of Medicine, dice que esto sucede a pesar de que los inmigrantes son generalmente pobres, viven fuera del perímetro urbano y tienen menos acceso a las facilidades médicas. Sus conclusiones se basan en tres encuestas socio-médicas hechas en Lagos, capital de Nigeria. El investigador cree que hay una clase de "personalidad inmigrante" y sugiere como innovación que los programas médicos sean inicialmente destinados a los recién llegados a la ciudad.

Las mujeres italianas continúan amamantando a sus bebés

Un estudio demostró que las mujeres italianas continúan amamantando a sus bebés, prácticamente en la misma proporción que sus madres y abuelas.
De 70 a 80% de 3.746 bebés nacidos en la clínica pediátrica de la Universidad de Roma entre 1967 y 1969 mamaron por lo menos 30 días.
Igual estadística para el período de 1933 a 1937 en Messina demostró que 69% mamaron en el primer mes y 84% de 1938 a 1942.
El estudio realizado en Roma, sin embargo, reveló un declinio en este tipo de alimentación hasta los 4 meses de edad. Entre 1940 y 1950, cerca de 50% de los bebés eran amamantados por 4 meses. La cifra ahora disminuyó entre 22 y 28%.

Estudio sobre el suicidio

Una investigación del Cornell University Medical College, de tres años sobre intentos de suicidio, dirigida por el siquiatra Ari Kiev, establece, por ejemplo, que el medio social en el cual el intento se produjo es mejor indicio de las posibilidades de que se repita el atentado que la forma en que se produjo el primero. Y si el acto es debido a un esfuerzo para llamar la atención, es muy posible que se repita dentro de un año. "Contra lo que muchos podrían esperar, dice el Dr. Kiev, el tipo de desórdenes siquiátricos no influye en las probabilidades de un nuevo atentado contra la vida. La actitud de las otras personas y del paciente con relación a sí mismo son más importantes que la naturaleza de los síntomas como elemento de juicio para pronosticar el caso."

La incompatibilidad sanguínea ABO causa abortos espontáneos

La incompatibilidad sanguínea *ABO* entre la madre y el feto es una de las principales causas de aborto espontáneo, informan los investigadores de la University of British Columbia, Canadá. Según K. Takano y el Dr. J. R. Miller, estudios de 78 fetos abortados indicaron que 35 de ellos tenían grupo sanguíneo incompatible con sus madres, una proporción más alta que la que ellos esperaban. Sin embargo, no parece haber una interacción entre las incompatibilidades *ABO* y *Rh*.

De las 229 mujeres que tuvieron abortos espontáneos antes de las 20 semanas de gestación, el 52% tenía tipo sanguíneo *O*, un porcentaje más alto que en la población general; 37,1% tenía tipo *A*; 9,2% tipo *B*; y 1,7% tipo *AB*. Los investigadores canadienses están seguros de que obtendrán la relación exacta del grupo sanguíneo en cada aborto espontáneo, chequeando por la técnica de la aglutinación mixta los tipos *ABO* de los fetos abortados.

El nivel de la alfafetoproteína para calcular la edad gestacional

El nivel de la proteína del suero fetal puede ser mejor para medir la edad gestacional que el peso en el nacimiento, afirma un grupo de investigadores suecos, El Dr. C. G. Berstrand y sus colegas del Hospital General y de la Universidad de Lund encontraron que, entre 165 recién nacidos el nivel de la alfa fetoproteína fue esencialmente el mismo en niños de igual edad gestacional pero de peso diferente. Sin embargo, entre aquellos, con peso igual pero diferente edad gestacional, el nivel de la fetoproteína varió. Los investigadores todavía no pueden decir exactamente qué papel tiene la proteína del suero en el crecimiento del feto.

Breaking a standard-size page into a four-column format allows the small stories to be handled as self-contained squared-off units, separated from each other by means of rules. This kind of rigid precision is appropriate in the context of engineering which is the subject matter of this Brazilian magazine.

The left-hand half is actually a subdepartment. The heavy rules act as both separators of stories, as well as attention-adders to the headlines to which they are tied with rigidly prescribed spacing measurements. The resultant color and texture is what gives the pages their distinctive appearance. Incidentally, the fully packed and bold handling of headlines, in some measure reminiscent of newspaper brashness, adds to the "newsy" feeling of the page.

NOTÍCIA

Componentes brasileiros para mercado de reposição dos EUA

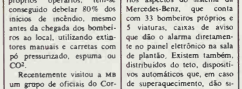
A Case do Brasil está exportando componentes de máquinas rodoviárias e agrícolas para os Estados Unidos, a fim de atender à demanda do mercado de reposição tanto no país importador como no Canadá. Em 1973, as exportações da Case deverão ultrapassar de 500 mil dólares, o que representa um bom volume de divisas para o Brasil.

Bombeiros conhecem na indústria equipamento especial antifogo

A Mercedes-Benz do Brasil-SP, possui em sua fábrica um dos mais eficientes e modernos sistemas de prevenção de incêndio. Graças a um treinamento intensivo dos próprios operários, tem-se conseguido debelar 80% dos inícios de incêndio, mesmo antes da chegada dos bombeiros ao local, utilizando extintores manuais e carretas com pó pressurizado, espuma ou CO^2.

Recentemente visitou a MB um grupo de oficiais do Corpo de Bombeiros de São Paulo, para conhecer melhor sobre os equipamentos especiais de combate a incêndio, montados em veículos Mercedes-Benz.

Durante a visita, os bombeiros puderam observar vários aspectos do sistema da Mercedes-Benz, que conta com 33 bombeiros próprios e 5 viaturas, caixas de aviso que dão o alarme diretamente no painel eletrônico na sala de plantão. Existem também, distribuídos do teto, dispositivos automáticos que, em caso de superaquecimento, dão sinal indicativo no painel eletrônico.



Fábrica baiana recebe equipamento elétrico

Continuando o fornecimento de todo o sistema elétrico contratado pelo Grupo J. Macedo, para sua fábrica de Feira de Sant'Ana, BA — Pneus Tropical S.A., a Siemens do Brasil enviou seis subestações abaixadoras com capacidade unitária de 1 000 kVA, que receberão energia de 4 150 V, para baixar para 440 V e distribuir para a alimentação dos motores das máquinas. Seguiram também mais quatro subestações com capacidade unitária de 150 kVA, para o sistema de distribuição de luz.

Segundo contrato, a Siemens terá o projeto e execução de todo o "engineering" da instalação elétrica, incluindo fornecimento, montagem e colocação em funcionamento dos equipamentos e a administração de materiais adquiridos de terceiros através do seu pessoal.

CRT recomeça exportações

Pelo navio "Delta México", seguiram no dia 3 de fevereiro para o México, mais 33 motoniveladoras brasileiras fabricadas pela Caterpillar Brasil.

Esse país, gozando das regalias oferecidas pela ALALC, tem-se mostrado um excelente importador deste e outros produtos da indústria brasileira.

Trijato mais silenciosa

A partir de 1974 os que moram perto de aeroportos verão um trijato que não fará aquele barulho ensurdecedor e não deixará no céu um rasto de fumaça. É que começarão a operar no Brasil os aviões DC-10.

Os novos aviões serão equipados com motores General Electric CF-6 e são, no mínimo, 10 decibéis mais silenciosos que os aviões interconentais do projeto anterior com quatro turbinas, e no entanto as novas turbinas possuem o dobro de empuxo das usadas anteriormente.

O primeiro motor General Electric CF-6 era de 40 mil libras de empuxo, utilizado nos trijatos DC-10. Posteriormente, a GE colocou em operação o motor CF6-50 com 50 mil libras de empuxo e que já está em serviço regular desde dezembro do ano passado.

Além dos DC-10 a GE está equipando o avião europeu "Airbus A 300-B", um bijato atualmente em testes de vôo na França, onde é conhecido como A 300-B. Este ano a Boeing começará a testar o seu 747-300, que terá motores General Electric CF6-50, com 51 mil libras de empuxo na decolagem, o único com empuxo acima de 50 000 lb.

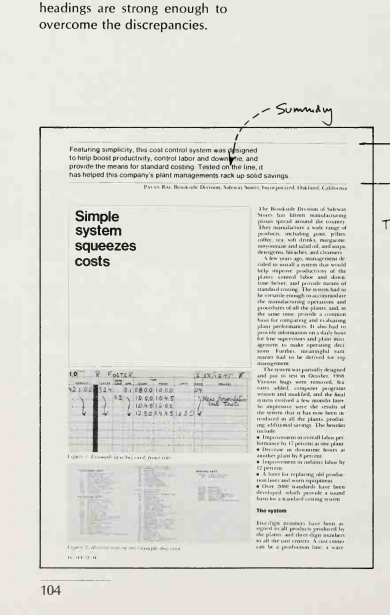
M. A. Trebbi Gois

Summaries in the feature stories set the graphic pattern for department headings

An abstract of each article is one of the requirements in this magazine, the official publication of the American Institute of Industrial Engineers. Run at the head of each opening page, the summary can also act as a curiosity-stimulator in conjunction with the headline. It also gives a standard out-of-the-way position for the byline and author's affiliation material.

The four-line abstract is placed within a one inch high space, defined by two rules. This same one inch high space is used for the department headings. As the magazine is examined page by page, the rhythm of that one inch space becomes a characteristic element of the product, tying all the pages together by virtue of that sameness despite the distinctive handling required by the various departments. The one inch headings are strong enough to overcome the discrepancies.

Multiple regression analysis is a very useful method of developing gross time standards when you need work measurement quickly. You can test them for statistical validity. And the cost is relatively small. Here's a case in point.
Donald D. Mantin, Rockhurst College, Kansas City, Missouri
Instant time standards



Summary

Logo

Headline

The 1st headings

104

Industrial engineering in fisheries is still new. The IE needs much knowledge before he can communicate intelligently with fishery scientists. But it's a challenging and rewarding world that awaits him

Maynard N. Bond, Oregon State University, Corvallis, Oregon.
Walter T. Pentzer, National Marine Fisheries Service, Seattle, Washington

Fisheries : newest frontier for IE's

Today, industrial engineers face critical problems of conservation, economics and of far reaching significance to society. The objectives of studies must now include careful consideration of the preservation and propagation of resources as well as their utilization. This is especially significant when such resources form an integral part of a complex ecosystem, as is the case in fishery, forestry, farm, and other agricultural activities.

Of the various natural resources fisheries present the most challenging problems to industrial engineers because of the complex factors involving the resources and their environment. Fishery resources for example, are living crops which mature, grow and decay, must be studied as a dynamic system in time and space, taking into consideration the modifying ecological and oceanographic parameters. From a simplistic viewpoint the population can be thought of as a dynamic pool in which recruitment and growth are increasing the population's total size while mortality factors both natural and man-caused are tending to reduce its size. The pattern becomes progressively more complicated when one takes into consideration the environment, other related species, and the fact that fishery populations are not homogeneous structures. The fishery population is best described as collections of subpopulations which differ in their degree of dependence. Many studies and analytical techniques used in population dynamics and other areas of engineering are similar to the problems industrial engineers are confronted with in their own fields. Industrial engineers are trained to consider multi-element systems and to study the interrelationships between the elements of the system. Fishery resources are typical multi-element systems.

As part of resource assessment, the magnitude of the potential yield must be evaluated in order to permit optimum allocation of the resource over time. Determination of total levels is not in itself a final solution as we still have the problem of detecting the exact location of the appropriate fishing grounds. This complication arises because fishery resources are not found in a belt of even thickness as in the case of containing terrestrial changes in its time space distribution and aggregation in response to changes in the environment (e.g. temperature, salinity, or oxygen levels), or the animal overfishing, spawning.

All of these factors must be taken into consideration in order to make sound considerations of costs and revenues in studying the fishing grounds, harvesting the fish, and returning to the port where the catch will command the best market price. Now a fishery system must also consider harvesting, processing and marketing problems. In addition, the system must be operational without the usual profits of subsistence.

Challenge of natural systems

The breakdown analysis of a fishing vessel operation is complicated by the inclusion of independent variables. For example, the simple two dimensional scanning shown as Figure 1 must be expanded to include the environment you are considering as a function of square Figure 2.

In an ordinary factory, the cost and revenue variables can be considered functions of the controllable variable of production level. But, when applied to a fishing vessel the production level is not a controllable input expense, while the amount of catch is the main factor that will determine the revenue. Since the two independents variables are only mathematically related, a breakeven line must be analyzed rather than a breakeven point. Also, the fishing vessel has a certain, if necessary to consider a dynamic and preferably an adaptive decision model.

Even under the simplest assumptions, the decision will involve the determination of days at sea that will maximize the profit

Expected profit $= \int_0^{\infty} [R(x)A(x)P(x)]dx = \int_0^{\infty} y(x)dx$

Where

$R(x)$ = the average revenue for X tons of catch on day x in starting a fixed time (τ) requirement for return journey

$P(x)$ = the probability functions for harvesting X tons during x days

$y(x)$ = the operating cost of vessel for x days.

The expression can quickly be complicated by the addition of more realistic assumptions are made

The function $P(x)$, will depend greatly on how the vessel schedules its fishing trips, the variability of the vessel's fish endurance of expected catch, variance in each location, and expected weather conditions on nearby fishing grounds. the routing algorithm will require more than a simple traveling salesman solution by a branch and bound technique. Whereas a traveling salesman problem is based on a single origin-destination of return in a fixed number of stops, a fishing vessel's return is dependent on the carrying capacity of the vessel, the abundance of fish at the destination, uncertainty of the fish to be held, assuming that the fish will be sold at the current prices established by the buyer. The tagging value on the branch and bound decision tree, moreover, depends on the time and date of an actual the past and the quality, size, and type of fish caught. All these difficulties are minor, however, compared to the problem of obtaining enough data to use with these models.

Role of industrial engineering

In spite of all these seemingly insurmountable difficulties it would appear that the industrial engineer is one of the best equipped persons to work with the fisheries scientist. As an example of how an industrial engineer might become part of a fisheries research team it is useful to look at our major federal fisheries agency, the National Marine Fisheries Service (NMFS) in Washington, and the organization of a salmon team (Ricker and Ridger, 1951). A population dynamics study, for instance, using a dynamic level as

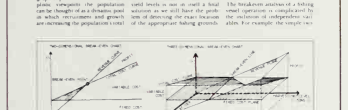


Figure 1. Even a broad-scope theory is complex and no fisheries operation

part of its overall mission is addressed to the problem of maximizing these associated with commercial fishing, sports fishing and the general public. This assurance is realized by carrying out research and generating services in such related areas as resource assessment (including exploratory fishing), resource allocation, fishing and gear technology, and aquatic rearing, food preserving, marketing, etc.

The close relationship between the activities of NMFS and the field and techniques of industrial engineering is illustrated in Table I. In addition, industrial engineers are a major participant in the following areas:

Systems analysis - The data collection and processing techniques of systems analysis are largely applicable even in natural system studies. These new methods of experimental design, sequential analysis, and simulation (Monte Carlo) are highly applicable statistical techniques. The testing of parametric estimators, regressions and correlation analysis are widely utilized in fisheries research.

Model building and simulation - Ecological problems involving the interrelationship of living organisms with the environment and man's activities lend themselves to simulation modeling. Models have been built and used to analyze such fishery problems as the effect of Bristol Bay sockeye salmon runs on March 1 ice conditions in the Naknek-Kvichak River, Alaska (NMFS) and the allocation of a salmon run (Ricker and Ridger, 1951). A population dynamics study, for instance, using a dynamic level as

OPINION

What will the next two decades show ?

This issue of Industrial Engineering concludes an eighty-listing effort and paper published from January 1969 through December 1971 in The Journal of Industrial Engineering, Industrial Engineering, and AIIE Annual Conference Proceedings. Together with the listing published in 1968 we now have a complete, and almost complete, compilation of literature published by the listed nine issues in Standing. (The December 1972 issue of AIIE Transactions will include an index for 1972.) As acknowledged in the introduction to the earlier, we are grateful to William B. Lewis, H. H. Young, and their staff members of Texas A&M University Industrial Engineering Department for their assistance in the compilation and to the members of AIIE and editors for the earlier and engineering processes.

Perusing the indices one notes the development of IE technology over the relatively short span of twenty-two years — from innovations in work measurement techniques through applications of modern engineering to complex industrial processes. We note the scheduling of engineers-in in the methods of analyzing and utilizing the results of problems which IIE is confronted. It is interesting to see the earlier years the expansion of IE concepts and skills into areas such as health care delivery systems, and the application of operations research techniques, for example, to assess the humanistic aspects (and, relational growth) of IE technology.

The growth and maturity of the industrial engineering profession parallels the development of the University. Just as this was described and lamented over the lengthy period of preparation of IE in the 1970's/1971 in the "Annual Report of Industrial Engineering."

Now, with the increasing emphasis on management and engineers in Engineering Schools, Schools have been going apart in specialization. The lesson to go to be that we IE's have been making contributions to more effective management of community, industry, and services that are causing these to multiply. Now, what are these overlapping, nonoverlapping areas that the engineers can use using IE to new heights?

From some current literature and much of the unpublished literature to which we are privy, private and consulting fairs, some IE's appear to be developing techniques that have long been known to their memory, others give the impression that they are not aware of the existence of the IE's. Some are developing clustering, clinical, operational, advanced techniques, but no attempt to integrate the accomplishments that are the results of the past. Still others are developing techniques of the future, either, or not their listing grows in IE technology. In IE we can conceive of progress, with one is young — without which we will suffer IE.

Norman V. Rice, Senior Member, IIE
Editor, Industrial Engineering

AIE NEWS ROUNDUP

Spokane gives support to student chapter

Spokane Section officers of the Spokane Chapter, presented a check to Jerry Hudson, president of Montana State University student chapter of the section. Looking on are Section Chairman Ed Bennett, left, and Chapter Advisor Dr. Ralph Hall. The chapter is building support in the community and industry for its student chapter. The money will be used for the purchase of a transistor, and the establishment of a standing money award in Industrial Engineering.

Editors offer guide to prospective authors

Editors of the Journal of Industrial Engineering, Industrial Engineering, and AIIE Annual Conference Proceedings have published a guide for prospective authors. Philadelphia Chapter, IIE, has also published a guide for authors on its Technical Program for the Twenty-Second Annual Conference and Convention. Both guides are available by writing to the Journal's Publication Department at the Institute of Industrial Engineers, 345 East 47th Street, New York, N.Y. 10017.

Three members serve advisory board

Three members of the Missouri School of Mines & Metallurgy chapter, IIE, have been selected to serve on the Industrial Technical Assistance Advisory Board, a division of the Missouri Department of Commerce and Administration. The board will meet quarterly in Jefferson City, Missouri, to discuss the progress and problems of the Industrial Technical Assistance Program. The program is administered by Harold Hamilton, professor of engineering management and industrial engineering at the School of Mines & Metallurgy.

IE's suggest improvements for training center

Members of the Metropolitan New York & Vicinity Section, IIE, have suggested improvements in the training program for the Industrial Engineering Center and Workshop, which is the laboratory for the Help of Industrial Engineering. The proposals were submitted to Daniel Fredericks, chairman of a committee appointed by the section to study the center's program.

The IE function at Armstrong Cork

Industrial engineering at Armstrong Cork Company is discussed in the March issue of the plant's publication, The Armstrong Cork Journal. The article describes the IE function at the company's plant in Lancaster, Pennsylvania, and explains how the engineers are organized and how they work. The article also describes the relationship between industrial engineering and other departments, and explains the role of the industrial engineer in the company.

Physician talks on industrial medicine

The value of industrial medicine in controlling occupational illness was discussed by the Occupational Health staff nurse, Barbara Stone, at the March 15 meeting of the industrial engineering chapter at Lamar University, Beaumont, Texas. Miss Stone described the duties of the staff nurse and explained the importance of industrial medicine for Port Neches plants as a preventive measure. Dr. Burns discussed the goals of industrial engineering in the program on preventive medicine.

IE MARCH 60

Mid-Hudson Chapter
John Krikorian, senior member
Jack F. Jerchio, fellow
Jim F. Wohlrab, senior member
Ron Mercer, senior member
Norman S. Rice, senior member

IE MARCH 61

MEMBERS IN THE NEWS

Robert H. Newson, Jr.

Harry A. Marmon

David F. Gibson

Robert H. Lockwood

Charles Beightler

Thomas E. Preston

Robert W. Newson, Jr. has been named Vice President of Operations of LeeHunt, in which position he is responsible for all manufacturing and engineering activities. Mr. Newson joined LeeHunt in 1970 as director of material and engineering services. Prior to this he had been director of industrial engineering at R. J. Reynolds Industries.

Mr. Newson, a Fellow of AIIE, is the 1971-72 President of the Institute an office he holds in recognition of many years of outstanding service to AIIE.

Harry A. Marmon, Senior Industrial Engineer at the American Safety Razor Company, a division of Philip Morris, Inc., Staunton, Virginia, has been promoted to Industrial Engineering Manager of Methods and Material Handling Systems.

Mr. Marmon, an engineering graduate of the US Naval Academy and a Lieutenant Commander in the Naval Reserve, is an associate member of AIIE and a member of the Industrial Engineering Society of America.

Robert W. Lockwood, President Elect of AIIE, received an honorary doctor of laws degree from Northrop Institute of Technology, Inglewood, California. The honor was conferred on him at the engineering college's annual graduation exercises at which he was commencement speaker. In his address to the graduates, Mr. Lockwood spoke of the skill and talent of individuals in the outside world as you did when you left high school and came to college. You will not find all of the things in the outside world good, but you will not find them all bad as a very small minority of students. As other computers would like you to believe, by studying for sure, you will feel change."

Mr. Lockwood has been president for Computer Planning and Development of the United California Bank in Los Angeles.

David F. Gibson, Associate Professor of Industrial and Management Engineering at Montana State University has been named Dean of the College of Engineering at Texas Tech. The school has recently been organized to bring together those disciplines which directly relate to the analysis through improvement, and operation of resource using systems. It includes the departments of industrial engineering, management science, computer science, accounting, business administration and agriculture.

Dr. Gibson was recently appointed to the Editorial Board of *AIIE Transactions*, and is a frequent contributor to both *Transactions* and *Industrial Engineering*. A noted author and lecturer, he has been honored by the AIIE Student Chapter at Montana State. He is also a member of the Institute of Management Sciences and ASEE.

Charles N. Beightler has been elected as a Fulbright Lecturer to the

Columns by outside writers require special handling

The two examples shown here are typical: the headline must be highly visible; the portrait of the writer is essential, as is the byline and affiliation; the name of the column, if it is a repetitive one, must be clearly visible; the character of the page must be distinctive yet must retain its identity as one of a series of department pages.

The simplest, most effective solution to this perplexing set of requirements, is to invent a format which will become standardized, varying only in headline and copy.

The example from *Nation's Schools*, right, has a rigidly prescribed logo area (into which other writers' names and mugshots can be slotted, as required); it also has a standard number of lines to fill. The *House & Home* example, opposite, is equally rigid in its box but allows a random column length, letting the text vary considerably in length (making life easier!).

Obviously there is an infinite number of arrangements possible with these elements. But, unfortunately, there are not that many formats which will allow the necessary flexibility within the context of the column page. To strike a proper balance between individuality and systematic anonymity is not easy. But, as in all the department pages, it is necessary; who says that it must be easy?

Dotted lines are more interesting than plain rules, even if they may look like coupons to cut out!

LOOKING FORWARD / Arthur H. Rice

Revolution, not evolution will change American schools

The question is: Will readers of this column permit me to write about the revolution in education? It's not my idea, but the prophecy of a greatly respected and honored educator who, I believe, has a message for all of us.

Okay, you say, who is he and what is this "revolution"?

The author of the prophecy is Stuart A. Courtis, 93 years old, former professor of education at the University of Michigan and Wayne University, who is now retired and living in Cupertino, Calif. Dr. Courtis is probably best known nationally for his pioneering in arithmetic tests and the measurement of child growth.

How the revolt will start

Dr. Courtis anticipates a revolution in educational philosophy and practice. He is not content to take the easy road and say that eventually, by the process of *evolution*, we will arrive at the goals that he envisions. He asks: "How long will it be before the energy of parent dissatisfactions, teacher strikes, sporadic attempts to improve both curricula and practices will flare into violent, unplanned revolution?"

Dr. Courtis believes that much of what we call "teaching" is shallow or worthless verbalization. Learning, he says, is primarily "becoming." The function of teaching, he maintains, is to serve. He writes: ". . . my slant is that education is most helpfully defined as 'becoming,' the natural process of evolution by which every individual, without exception, as a result of the experience of living and as long as he lives, is continually becoming something different from what he was just before."

In seeking support for education, how often have we used the phrase "knowledge is power!" But Dr. Courtis reminds us that "while it is knowledge that gives power, the ends to which that power is directed are determined by the 'values' held by the persons who control the use of power. Down through the ages, tyrants like Stalin, Hitler and others have given many demonstrations of how men may use power for their own selfish ends. Democratic governments escape partially from such disturbances and try, ignorantly, to give equal opportunity for growth and development to all. But to this day, and in every kind of government we know of, individual men and women seek to manipulate constitutions and laws to their own benefit. Democracy, as we know it, is not the answer."

May I suggest that you read this again. I have done so a dozen times, and each time it takes on more meaning for me. It says to me: How then have we failed in the education we give our children, and what we can do to bring about a better society?

How children will learn

Now let's read Dr. Courtis' answer to this question, even if we think that it is impractical or impossible.

"Try to imagine a Service Station in which children grew up in an environment *free* from the imposed control of parents, teachers, politicians and so forth, and were given opportunities to develop in terms of their own inner natures. . . . I believe that if children grew up always solving cooperatively the problems that arise, always learning from experiences, books or persons, given only when they are faced with a problem on which they asked and received the help they desired, evolutionary values would grow spontaneously. Then, when as adults, they gradually begin to face present world conditions, with conflicting interpretations from statesmen, artists and scientists, capitalists, labor unions, and so forth, and when they discover for themselves the misery, sickness, discontent and frustrations now existing, I believe they would aggressively set themselves to solving such problems cooperatively."

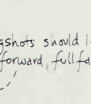
We may not accept Dr. Courtis' plan for the kind of education that would lead us to a better society,

Continued on page 16

Dr. Rice, editorial adviser to NATION'S SCHOOLS *and professor of education at Indiana University, Bloomington, is coordinator, Instructional Systems in Teacher Education, Indiana University.*

Mugshots should look into the page -- or forward, full face, at the reader

THE ZONING SCENE



"Regional planning sounds like a cure-all, but it could hurt more than it helps"

There's a new magic potion going around planning circles, and it's called "regionalization." Start with a housing shortage, add a stiff dose of developers' frustrations, a dash of zoning litigation, and season with professional planning principles. Stir well, using rules of thumb, and bring to a full boil.

The new brew has a bewitching flavor, but it may sit poorly in the stomachs of developers and citizens alike.

It is supposed to neutralize an overdose of local home rule. Everybody wants to solve the housing shortage but no one wants it done in his neighborhood, and in the frontier townships, developers have faced increasing frustrations in seeking approval for new projects, particularly denser ones. Many developers believe that a higher-level planning authority would be more sympathetic to their views.

Professional planners rightly point to the need for a regional approach to such interlocking systems as sewer, water, and transportation. Many will argue for regionalization because it seems to offer a simpler way to save green belts, encourage logical land use patterns, and foster orderly cities.

But as planners ourselves, we're opposed to potions and panaceas. We think there's a better approach.

When local resistance is intense, zoning litigation is often the last resort of the developer. Frustrated by the delays and demands of local officials and the insistent queries of little old ladies at public meetings, developers have turned to the law office to take on townships that use large-lot zoning as a weapon.

But while courts usually rule against townships in such cases, the decisions have not provided real relief either for the developer or the consumer. Local authorities may pay nominal heed to the court by zoning impractical locations for high density development. In one case, for example, local officials responded by zoning an old quarry for apartments. And the local community has such other potential weapons like codes and subdivisions ordinances, etc. Clearly, the practical solution to the problem lies outside the legal arena.

The positions of developers and local people are really not inherently irreconcilable. The developer can save up to $10,000 per acre by clustering, increasing densities, and reducing engineering costs, and he can still comply fully with health, safety, and welfare requirements. Through such techniques as PUD, he can offer the township considerable advantages in reduction of local service costs and preservation of the landscape. And the township stands to gain even more if the new project brings in considerably more tax revenue than it costs in schooling and municipal services—as a PUD usually does.

The process of negotiating plans for new development is, therefore, a grass roots affair. It's a process of equitably swapping until everyone is protected—developer, officials, and neighbors.

The people involved are neighbors, administrators, politicians, and developers. Neighbors will want a development that looks good and pays its own way. Professional administrators often feel obliged to protect their position by enforcing the highest standards. Politicians must hold down taxes in order to stay in office and are therefore anxious to minimize service costs. Developers, public or private, may need concessions in terms of higher densities in order to avoid onerous costs in construction.

All of these various interests can be accommodated much more directly by the local political process than by a regional bureaucratic labyrinth.

Frontier townships got into a bind because their rapid growth in the post-war period was spurred on, first by easy FHA financing, and then by interstate highways. This growth spread far in advance of services, without government support for sewage treatment systems, open-space purchase, maintenance and improvements on local roads, etc. The result has been disproportionately high taxes.

It follows that frontier township authorities are not optimistic about government promises of relief, particularly with the accompanying threat of government action to force acceptance of additional unprofitable housing. Understandably, the result of this outlook is restrictive zoning.

In the local political process, the developer has a chance to show how, on the basis of the services he provides—roads, utilities, community buildings, shopping areas, recreational facilities—his PUD will provide a large tax surplus. And he has the opportunity to develop local support.

If instead of this he finds himself dealing with a regional office, he may become enmeshed in additional layers of red tape, seeking relief from a bureaucrat who is much less responsive to the local problem, and probably even more unreasonable than the local administrator. Like the local bureaucrat, his position obliges him to enforce the least flexible standards, since that procedure tends to justify his staff and his budget. But while the local administrator works under the politician, who is very responsive to cost-saving proposals, the regional bureaucrat is guided by no locally responsible person.

A reasonable process of review serves the self-interest of good developers and good community government. Local communities are obliged to see to it that all new development has a positive impact on educational costs, open space reserves, and the whole spectrum of municipal services.

They have the police power to protect the health, safety, and welfare of their residents, which include establishing reasonable legal requirements for development and a process of township review. In the process of review, the developer must demonstrate that his project will benefit the community.

In the process of evaluation, developers meet with the local people face to face, swapping proposals and requirements until everyone is reasonably protected. Neighbors, administrators, politicians, and developers can accommodate each other, avoiding onerous costs in taxes and in impractical construction. If the developer and his planner have proper credentials they will get a fair hearing for most proposals. And if they produce a well-documented professional plan that shows a financial benefit to the community, chances are they will succeed. We're not convinced that this process can be replaced by the imposition of a once-removed authority on the regional level.

JOHN RAHENKAMP, PRESIDENT, RAHENKAMP SACHS WELLS AND ASSOC., INC., PHILADELPHIA, PA.

There is magic in numbers

In nearly every issue of *House & Home*, a feature story about a particular development is run, packaged as part of a continuing series. Since it is shown at considerable scale and uses at least six pages in full color, one would hesitate to label it a "department". Yet in the very fact of its continuity (and thus its familiarity), and in the repetition of the design of the opening spread, it fits the definition.

The design of each opening spread which helps to define it as a department-of-sorts consists of four simple elements: a very large, striking picture; a credit block citing facts and figures; an introductory text block describing the project in its context; a vertical black bar at left with label headline and number dropped out in white, or in color. The subsequent spreads vary in design, according to the requirements of the material, of course.

The key to the recognition-effect sought by the design is the numeral. The rest of the design may or may not appear familiar and reminiscent of a previously-seen story. But the number obviously implies that there have been umpteen such portfolios published before and others will most probably follow.

PROJECT PORTFOLIO 16

PROJECT: Amherst Fields
LOCATION: Amherst, Mass.
DEVELOPER: Otto Paparazzo Associates Inc
ARCHITECT: Callister, Payne, & Bischoff
INTERIOR DESIGNER: Anawalt & Myer
SITE AREA: 626 acres
NUMBER OF UNITS: 1,640 condominium townhouses, duplexes, fourplexes and detached units plus a 34-acre commercial center
PRICE RANGE: $23,500-$52,000

If the photo above gives you an impression of farmhouses set in an unmowed meadow, the effect is not accidental. Developer Paparazzo and architect Callister, the men most responsible for the landmark design of Heritage Village in Southbury, Conn., faced a problem here: how to maintain the site's strong rural quality at a density of about three units an acre. Detached housing at that density would have destroyed much of the natural landscaping—leaving, at best, tiny front lawns and insignificant greenbelts. And clustered townhouses and apartments would have looked suburban rather than rural. The solution: a combination of duplexes, triplexes and fourplexes (plus an occasional detached unit)—all sited further apart than in normal cluster practice and all in a contemporary version of New England design.

Four style changes in ESQUIRE

TRAVEL NOTES
RICHARD JOSEPH

[illegible] the start for this [illegible] Empress Isabella an adventure game you'll find in multiple boxes around an 11 person world by plotting the fabric so that you where you're going, if you're not sure, you'll find out you're here all what will [illegible] the Daily Express from now, in the mid-80's, when Express will [illegible] the capital's entertainment, and the owner will have been in Palm Pavilion for some young lovers.

The Express, which has [illegible] [illegible] from [illegible] and shows the returns in transport statistics of speeds somewhere in the neighborhood of 25,000 miles an hour. That means that the Express will be [illegible] [illegible] [illegible]

Four styling developments in SIGNATURE

Far Corners

The Road to Timbuktu

You take the first left, or is it a right?

Signature, Dane Steeh

1978

Detouring Through Austria

Stanley M. Braverman

1980

The Selective Buyer

Glassy-Eyed on Fifth Avenue

Stanley M. Braverman

1981

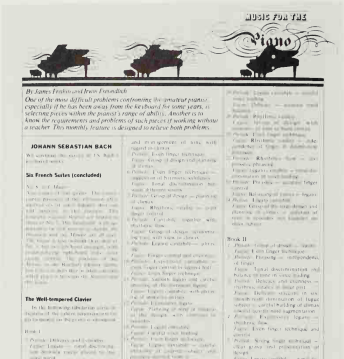
LETTERS OF A GLOBETROTTER

A Pilgrimage

Stanley M. Braverman

1982

DEPARTMENT HEADINGS WITH PICTURES


MUSIC FOR THE
Piano
By James Friskin and Irwin Freundlich
One of the most difficult problems confronting the amateur pianist, especially if he has been away from the keyboard for some years, is selecting pieces within the pianist's range of ability. Another is to know the requirements and problems of each piece of music without a teacher. This monthly feature is designed to relieve both problems.
JOHANN SEBASTIAN BACH
Six French Suites (concluded)

Change shown in a strip

Ovation, Ira Teichberg

Symbolic mezzotint photo

Keynote, Edward Spong

Personality quote

Capital, Helmut Schmidt-Rhen

Cartoon inside and outside box

Panorama, Norman S. Hotz

DEPARTMENT HEADINGS IN PLAYFUL TYPE

Fortune, Ronald N. Campbell

Two-line logos use stacked, butting type.

Audio, Frank Moore

Decorative outline typeface impaled on rule

Mechanix Illustrated, Andrew Steigmeyer

Words, symbols, pictograms

Forest Industries, Peter A. Tucker

Shadow from title incorporates byline, mugshot, etc.

DEPARTMENT HEADINGS IN PANELS

INDUSTRY NEWS

Development work progressing satisfactorily at Selby

UNITED KINGDOM

AUSTRALIA
New Bre-eza coal discovery could rival Hunter Valley deposits

World Coal, Neil R. Shakery

Large type dropped out of large, black field

WORDVIEWS

Compulsive Browsing

Audubon, Daniel J. McClan

Wording centered in narrow band, two rules

INFOFILE

A DIGEST OF STUDIES, SURVEYS AND STATISTICS

Economy

Attitudes toward taxes and spending

Public Policy

Individual problem-solving

Energy

Living a crisis

Urban Policy

Increasing public strife

Foreign Policy

Nuclear and the Third World

National Journal, Nancy M. Krueger

Small black type over light gray screen

CHANNELS

ON AIR

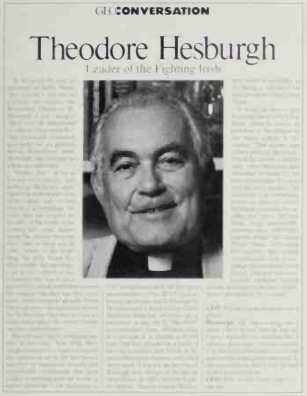
'I Heard the News Today . . . Oh Boy'

by Gloria Emerson

Channels, Dean Morris

Bold type over pattern of horizontal rules

DEPARTMENT HEADINGS IN UNUSUAL FORM



Geo, Susanne Walsh

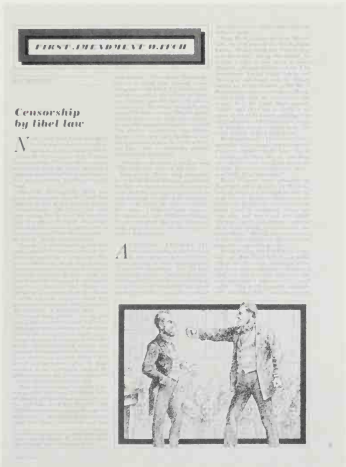
Overlapping two words in two different faces

Discover, Leonard Wolfe

Logo and box placed at an angle

North Shore, Larry Sampson

Light outline logo; items in tinted boxes



Inquiry, Bruce McCullivray

Stylish graphic embellishment

Departments and generous white space

WORKING

THE OFFICE AS FORTRESS

EQUAL OPPORTUNITY FOR THE UNHEALTHY

BRINGING WORKERS TO THEIR KNEES

WORK—DON'T RUN—THROUGH AIRPORTS

Next, Lester Goodman

Topic word anchored in clean space demarcated by rules.

By Bernard E. Poseeb

METHODS IN MANAGEMENT

SAVING YOUR FIRM FROM A FLOOD OF PAPERWORK

THIRTEEN TIPS TO TRIM PAPER DISTRIBUTION COSTS

Inc, Paul Schaffrath

Topic, head & byline float in space edged by text.

Una cápsula de bobina móvil (MC), vista por dentro

Hifi

Bobina móvil

Ajedrez

Entre el odio y el desprecio

Posición después de 13 C x d5

Fotografía

El centro de interés

Vídeo

Batalla de sistemas

Una de las diferencias más importantes entre los sistemas Betamax y VHS es la forma de los casetes. A la izquierda la forma ovalada de una cinta Beta, a la derecha la forma en M característica de los casetes VHS

El Diario, El País Semanal, David García

Unexpectedly deep head - and foot- margins define whole section.

DEPARTMENT HEADINGS AND RULES

CAREERS JOINING THE FOREIGN SERVICE

Diplomacy is the name of the game for Foreign Service officers. Women now are serving as ambassadors, political policymakers and key officers around the world—sometimes in trouble spots

BY NANCY J. WHITE

W

CHANGING FOR THE BETTER

FITTING IN A FAMILY

Working Woman, Tony Iannotta Petrella

Rule of same boldness as the topic words type

PERSONAL FINANCE — BY JEFF LADERMAN

The New Age Of Financial Services

Deregulation is changing your banking habits.

A strong, recession-wary reporter pounded out a startling story for a bank robbery on his old Remington Standard. He proudly clipped the page into his editor's copy basket minutes before deadline and, waving his pointer fingers aloft, the editor sourly grunted well-seriously blue pencil the story.

There was no bank robbery, growled the editor after skipping the slugs off to the composing room. It was a savings and loan robbery.

The reporter was puzzled. "What's the difference?" he inquired, ambition meekly, until the reporter. "And the bank lends you money and pays you interest on your money. Right? This savings and loan does all of that, so isn't it also a bank?"

The veteran, who had gone through the same scenario with droves of reporters and many other people who regularly confuse the two, explained the differences. For years afterward the reporter would remember savings and loans make home mortgage loans, while bank lend funds, checking accounts and pay about everything else.

A few years later, the reporter and others that savings and loans were acting like banks, offering checking accounts and credit cards. And he'd much know from personal experience that it should get a home mortgage loan from a commercial bank.

The reporter also saw automatic teller machines in supermarkets and shopping malls. And then Merrill Lynch—the Wall Street brokerage firm noticed had begun to offer services that would sound awfully as useful to the banking.

Then when the difference between a bank and a savings and loan and a brokerage firm?

Today, not much. The banking industry is in the midst of deregulation. In effect, financial institutions are being allowed to strike or seem to the competitive marketplace. Institutions are also that financial institutions will eventually pay more in market interest rates to depositors. But it also means borrowers may pay more for loans. And everyone will have to pay for fees in services such as checking accounts and credit cards.

Deregulation will also change our

Customers want convenience in the form of total financial services.

banking habits. For one, many neighborhood branch banks will go the way of the dinosaur. Instead, there will be repaired by teller machines—for such routine transactions as deposits and withdrawals. Some people may eventually bank at home by combining personal computer systems and cable television service. Alaska is Knoxville, Tenn., see is already testing such a system.

The bitter has that survive will be more like financial planning and service centers," says Del Mobley, a Chicago-based banking consultant. Many banks are already offering a wider menu of services than ever before. Mobley foresees that eventually banks will offer a customer a deposit a choice of six-month or four-year fixed-rate certificates of deposit, says Mobley deregulation would allow for a greater variety of options—such as money market mutual funds, corporate bond funds, tax-exempt funds or even blue-chip equity funds.

I don't expect banks to get into the investments for their customers but they'll want to offer the kinds of investment vehicles their conservative clientele would like," Mobley adds.

With the onset of deregulation, it would appear that brokerage firms are acting like banks.

Merrill Lynch's Cash Management Account (CMA), already used by 800,000 people, is highly discussed customers and unusual. Through about 70 percent of the firm's offices around the country, virtually skirts around the rage of banking. Using a complex computer program (the product of some one hundred man-years of time), the Wall Street giant is blazing a new trail in one-stop financial management.

To join the CMA program, an investor needs a minimum of $20,000 in cash or securities or any combination of the two.

The program works like this: let's say you start with $10,000 in the CMA money market mutual fund and $10,000 in marginable securities. (Just about all the securities listed on the New York Stock Exchange meet those on the American Stock Exchange and many of the over-the-counter issues are marginable.)

On the cash you're earning the money market rate. You can write a check against that cash, use your CMA debit card to buy goods and the check clears. Unlike most money market funds with check writing privileges, CMA has no minimum amount rules. Should you earn any dividends or reverse proceeds from sales of securities, you can deposit the

Mainliner May 1981 19

United Mainliner, Jerold Smekler

Thick-and-thin ("scotch") rules fit character of typeface

HEALTH AND RELIGION

Ministerial Burnout. This affliction of the "Bionic Minister" can be avoided by taking some common-sense precautions. Here's how.

by William Rabun

Ministry, Byron Steele

Decorative quality of triple rule adds graphic distinction

The National Interest/Michael Kramer

WANDERING IN THE DESERT

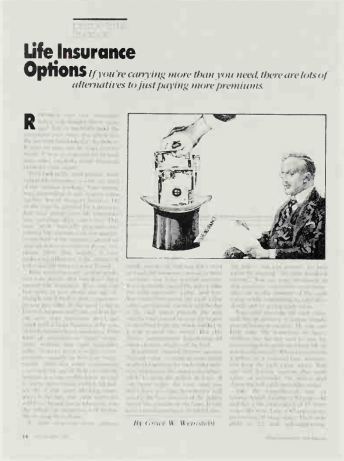
With apologies to Dürer

Reagan's Mideast Mirage

New York, Roger Black

Rules of varied weights add color and organize space

DEPARTMENT HEADINGS USING CONTRAST OF TYPE COLOR


Life Insurance Options
If you're carrying more than you need, there are lots of alternatives to just paying more premiums.
By Grover W. Wentworth

Prime Time, Judy Fendelman

Topic in light face, headline bold, deck italics

New Times, Kelley/Wengand

Topic and byline in light, headline in bold caps

Folio, Steve Phillips

Logo in light, light face, topic in rich bold

PETER DOBEREINER
Four stars uncover the secret of golf
It was Arnold Palmer who remarked that all pros are fighting a hook.

Golf Digest, Peter Libby

Headline (small, light) overwhelmed by byline

Tennis, Michael Brent

Simply-handled typography of text inserted into full-color frame/ repeated on several pages. Various colors also overlaid on text itself. Pictures in color.

Travel & Leisure, Adrian Taylor

8-page form printed in red and black on distinctive, rough, tan stock is bound into the issue with four pages in front, four in back. Each half is handled differently: an attention-getting news format up front; an elegant, analytical presentation in back.

DEPARTMENT SECTIONS FOUR-COLUMN MAKEUP

Attenzione, Paul Hardy

Lively composition of widely-varying story lengths, tiny-to-huge pictures, random patterned space allotment. Text set to conform to silhouetted picture shapes

Technology Illustrated, Peter Hudson

Long stories provide sufficient text to establish simple, visible column pattern, so no rules are needed to hold it together. Space flows easily from column to column.

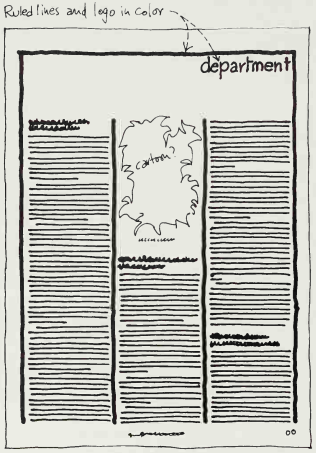
TWO VARIATIONS USING METALLIC SILVER BACKGROUNDS

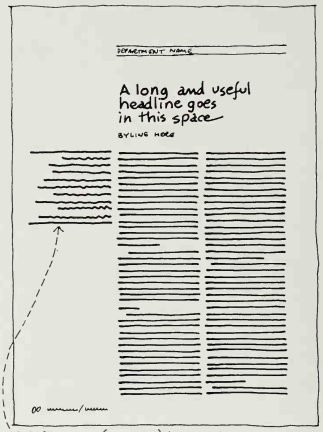
Omni, Frank de Vino

Type in black over silver. Picture areas "knocked out" of silver background and photos run in duotones — two coordinated halftones on top of each other, rich black.

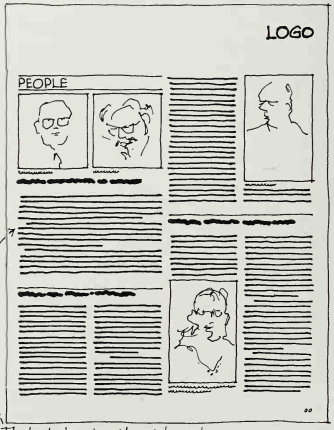
Panorama, Norman S. Hotz

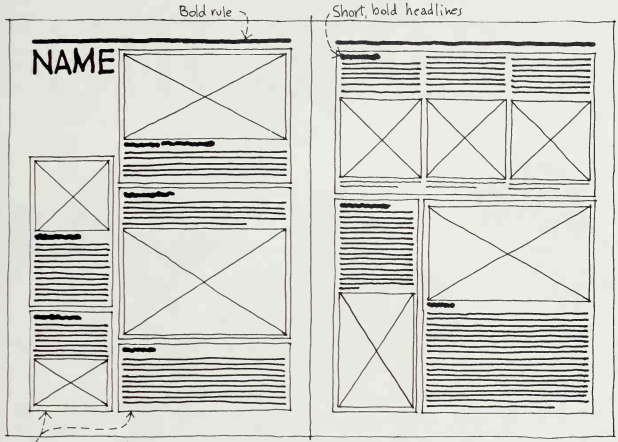
Embellishing rules and some panels dropped out from silver; others run in black on white or black on silver, creating rich diversity. Pictures run in horizontal line screen.

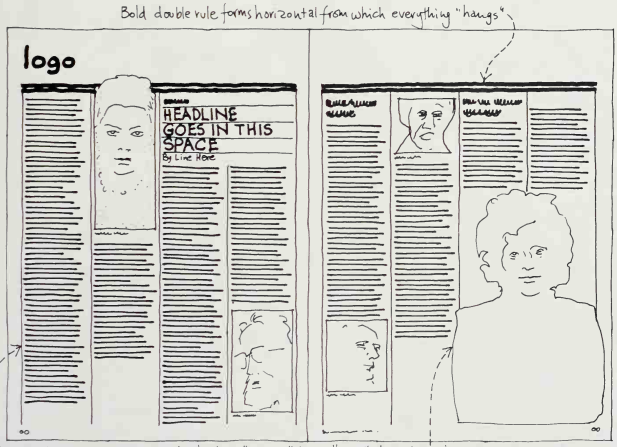

Ruled lines and logo in color
department
cartoon


DEPARTMENT NAME
A long and useful headline goes in this space
BYLINE HERE
Boldface deck (summary) between two rules

NAME OF DEPARTMENT
The headline goes in this small space like this
Text could be broken up into short items...
but mugshot implies one-person's viewpoint about them


LOGO
PEOPLE
The lead story in wide-set, larger type


Bold rule
Short, bold headlines
NAME
Boxes (one per item) based on simple 3-column page makeup: stacked boxes to fill space available


Bold double rule forms horizontal from which everything "hangs"
logo
HEADLINE GOES IN THIS SPACE
By Line Here
Vertical rules are strong grid which is "broken" by silhouetted pictures in various ways

EDITORIALS

It is quite normal to find a whole page of a publication's issue devoted to opinion, labeled "editorial" or some such title. Some devote more space, such as a spread or consecutive rights (especially if there are two or more editorial writers expressing their opinions); others squeeze in editorials on a vertical two-thirds of a page alongside the masthead, perhaps. But an editorial comment of some sort is usually there, somewhere.

This is a page that ought to look different since its content is different from the rest of the publication: the normal magazine pages show reports of outside goings-on. The editorial is an inward-looking page, giving the editor an opportunity to pontificate, see
<-- into the future, make pronouncements, warn of impending doom. It ought to look like what it is: serious of mien, weighty in tone, with large type, generous white space, wide columns.

The page consists of the following elements:

- The text itself.
- A headline. In informally written, chatty editorials that don't deal with earth-shaking events, the head is sometimes dropped, but there usually is a headline simply because the editors want to draw attention to their piece.
- The "editorial" label (or its equivalent) somewhere on the page, usually at the top.
- The writer's signature, either typeset or handwritten.
- The editor's picture, sometimes: either because it helps to personalize the page, or because it is useful to the publication to show that its editor is the distinguished and well-known leader-of-the-industry Mr. So-and-so. It can also work the other way: Mr. So-and-so can become a spokesman for his readership because he becomes well known through his picture on the editorial page.
- A cartoon; if the drawing is an illustration of the main direction of the argument stated in the words, then it is a cartoon-illustration; if, however, it is a separate, independent thought, then it becomes a true editorial cartoon and the cartoonist becomes a subsidiary

editorial "writer." This hairsplitting of definitions is important because the placement of the cartoon on the page is affected by the kind of cartoon it is: if it is an illustration, it ought to be closely tied into the text or headline; if it is independent comment, it ought to be separated from the words as clearly as possible.

The placement of the editorial page within the issue varies from publication to publication, but it should *never* vary from issue to issue of the same publication. The reader should be able to find the editorial page immediately, whether the page is in the front of the book (right after the contents page, where it is most often found) or whether it is the first right-hand page of the feature section. It could well be the last page opposite the inside back cover — or anywhere else that makes some sense — as long as it is always to be found in the place the reader expects it.

Of greater importance than the page's position in the book, is the question of what goes on the page opposite. Since editorial pages are normally just a single page, and since they claim high readership because of their intrinsic interest, the opposite page is often sold to advertisers at a premium as a "preferred position." It follows, therefore, that the design of the editorial page must take this unpleasantness into consideration. Unpleasantness? Certainly, because the advertiser who invests extra money for the page is going to want to get maximum visibility for it and the ad will be as full of attention-grabbing graphics as the agency can devise (which tends to detract from the characteristics of quiet dignity and seriousness that the editorial page needs). The upshot is that we must be twice as careful in creating the proper climate for the editorial because of the competition for attention from the page opposite.

So, the desired characteristics are simplicity, larger-than-normal scale, smoothness, elegance. These are the design qualities we seek to create the maximum contrast betwen our important words and that distracting madness across the gutter. Perhaps the word *restraint* is the most accurate to describe the desired goal.

How do you achieve it? The examples that follow on the next

twelve pages will be analyzed with this specific characteristic in mind. They can be summarized as follows:

1. a wide moat of white space (or something acting as a "wall") to separate the two pages
2. type set larger, in longer lines than usual, but with ample extra space between the lines to make the words comfortable to read
3. no overcrowding: self-discipline and ruthless editing to prevent overfilling the page with words
4. setting the text ragged right, perhaps, to act as a contrast to the flush-right setting in the rest of the issue
5. standardized placement of signature cut, photo of personality, page slug, dateline, etc.

Now a word about this *standardization* problem. Most publications have worked out a format for this page and seldom vary from it. They know exactly how many words they need for the page, how long the heads can be, and so forth. Such standardization makes great sense both from the point of view of recognition value of the page, as well as in the workability of the page.

Yet straitjacket formats have an inherent danger too. They can rob the editors of incentive to do something larger or deeper or more revolutionary ("it won't fit anyway so why bother"). Furthermore, sometimes the standard format is wrong for the material that is to be published; sometimes you need more space, or a different typographic handling, to do justice to the message. In such cases, let the page reflect those needs, whatever they may be, allowing flexibility where it is useful, and retaining rigidity where flexibility is unnecessary. So, if a single-pager suddenly has to expand to a spread, retain the slug in the top right-hand corner (if that's where it usually is), and let the signature cut be at bottom right (if that's where it usually goes), and set the headline in two lines at the far left (if that's how you normally handle it) — just expand the body space required to fit the copy. The elements placed in the standard positions will carry their own recognition value over into the unusual format and you can achieve the best of both worlds: an expressive, logical presentation which still signals "editorial page" at first glance.

Large type set ragged right is the major feature that attracts attention to this page from *Dental Economics*. The text is, in fact, quite short, but the type size masks that. The liberal use of white space also adds to the grandiose scale of the page (besides splitting it away from the ad across the gutter at left). The typeface of the body copy (Melior) is used in bold in the headline, and a similar, but more decorative face (Dominante) is used for the department heading. They work together to give the page its unified character.

Pale color tint

Editorial Comment

THE PUBLIC MUST REORDER ITS PRIORITIES

A news release from the November meeting of the American Medical Association was sharply critical of physicians who add a service charge to unpaid bills. Doctor Elmer G. Shelley, chairman of the AMA Judicial Council, stated that adoption of such collection methods "reflects adversely on the whole profession, especially on the countless doctors who extend credit willingly and even write off old accounts." He added that if a physician is not paid as promptly as are other creditors, "he should recall that he is a professional man, with all the perquisites that the term implies."

This seems to be the season to take pot shots at the professional man who is striving to improve his delivery of health services by upgrading his practice administration procedures. Hard on the heels of the AMA's attack comes a book reviling the dental profession for its alleged money-oriented motivation. The overtones are clear.

Our readers will recall that the September 1970 *Dental Economics* featured in-depth treatment of this timely subject. The authors were representative of four points of view—a dentist, a practice administration expert, a banker; and a dental tradesman. The dentist conceded that credit has become a national habit. The consultant objected that such a commercial practice is unprofessional.

The banker warned against entering the arenas of finance; and the dental tradesman defended the need for a service charge, because "business is business."

The individual practitioner should have the privilege of determining how to meet the problem of the unpaid bill. No one has the right to make this decision for him.

Further, it is our opinion that the public must reorder its priorities and stop hiding the doctor bill at the bottom of the pile month after month.

This page is handled with the same graphic solutions as are the other departments of *Library Journal* (see page 84). But on this more dignified page, the text is set in two columns rather than the usual three. The lower rule of the logo is used as the top edge of the box that encloses the entire page. The amount of text can vary, within reason, to give the writer some leeway.

Ideally, a little more white space above the headline would have been preferable. As in the example opposite, there is a distinct relationship in character of the typography: the headline type (Stymie Extrabold Condensed) is very similar in structure and weight to the Egyptian Outline used for the specially-set department slugs. The "specially-set" describes the special artwork-handling the letters require in order to touch and overlap.

LJ EDITORIAL

Fear of information

It is easy to understand, in these times of the ubiquitous tape recorder, how people in positions of authority could be increasingly afraid of the public disclosure of information, or the public statements of their subordinates. Anyone whose memory includes the last 25 years will remember that secrecy, surveillance, and closed meetings were the awful earmarks of those frightened blitzes. There are depressing signs that this phenomenon is on the upsurge again, probably because of the current social and political climate. Very few public or private officials can utter anything without having to "eat" their words later because of public disclosure (*LJ* has quite an appetite for its own.) The institutions of our nation, including the libraries, seem to be building a network of "secure" oval offices, and instead of announcing information to the publics they serve, they carefully leak it, piecemeal, to the press and others. One supposes that the spectacle of a U.S. President having to "eat his words" has scared every other public and private office holder. The result has been a growing threat to freedom of information, freedom of expression, and to the entire concept of an "open" society.

Librarians and libraries have a great deal at stake in times when the climate produces this kind of censorship through information "management." It threatens their access to all the traditional materials and information, but more important, it threatens those new-born programs that, in our view, may contain the seeds of the future public library. Community information programs depend for their viability upon the ability of the library to collect, organize, and make public not only the published and publicized information available, but also the unpublished and unpublicized data about community or neighborhood problems, life crises, and citizen's rights as they confront government, law, business, or employment.

On page 1650 of this issue we report the directive from the administration of the Cleveland Public Library warning the Cleveland staff to be "discreet when approached by representatives of the news media" and to refer to all requests for "nonpublic" information or "opinion" to their chief or face a reprimand and/or "disciplinary action." We don't mean to focus on Cleveland, which has other problems now, and the practice of muzzling the staff is common to nearly every major library, and it is virtually an untold story because of the muzzling. We've often tried to interview staff members from many libraries when there were problems, and in nearly every case their fear was sufficient to prevent them from any disclosure of information or opinion. For a journalist, even a library journalist, that kind of climate is the most dangerous because it usually means either one-sided reporting or that the story will remain a secret.

A few other examples will sharpen our point. Although it has been used to threaten a variety of activities and units of the American Library Association, there has still been no detailed disclosure of the complaint of the Internal Revenue Service against ALA, yet it is, in large part, our membership dues IRS wants to tax.

On the current ALA Conference Program, despite a 1971 policy specifically limiting closed meetings to discussions affecting "privacy of individuals or institutions," we note at least 25 groups that have scheduled nearly 60 time slots for closed meetings. Many of these are necessary, but what or whose privacy is threatened by the RTSD Organization Committee, the ACRL Academic Status Committee, the RTSD CCS Descriptive Cataloging Committee, the AALS Executive Board, the ERT Executive Board, COPES, the AASL Professional Relations Committee, or the host of others? One can't help suspect that here again is an example of committee members unwilling to say what they have to say on the record for their members. In this case, however, they are obviously in violation of Association policy, if not in legal terms, certainly in spirit. It is that difference between stated intentions and real intentions that raises serious questions.

The point of these few examples, and they are only examples, is that librarianship, like the society it serves, is quite willing to give lip service to the idea of freedom of information, but when that information or opinion is from "my library," "my staff," "my committee," or "my lips" then a different set of rules applies. This kind of intellectual schizophrenia can only damage our stand on freedom of information and make our formal pronunciamento mere mouthings. If we librarians, as the public's purveyors of information, are willing to accept, as we are asked to do, the idea that our first amendment rights are subject to administrative licensing, we really don't have those rights at all.

If we're willing, in the library, to disclose all the details of the workings of someone else's shop, how can we justify this secrecy about our own? *John Berry III*

Two-page editorial: major thought first, followed by afterthoughts on page two

The first page, shown at right, is a straightforward and not frightfully exciting graphic presentation. It could hardly be simpler. But it is effective for several reasons: first, its very simplicity makes it stand out; second, the huge white spaces are unexpected and surprising; third — something not discernible here but essential to understand — page seven of each issue is devoted to the editorial, come what may. The readers know where to find it (the page following the Contents) and they look for it.

The follow-up page, shown opposite, is looser and less formal. It carries its own title, yet it remains very much an editorial page since it is comprised of comments by the editor. The makeup varies according to the material, but the white band at top is standard, as is the three-column makeup.

What is significant about these two pages is the comparison between the two graphic images they convey. There is no question but that the real editorial page *looks* like one whereas the Perspectives page does *not*.

The difference lies in the detailing: the headline treatment — large and light versus small and black (which is much more ordinary); the amount of white space; the dignity of the page arrangement, tall and vertical versus squat and fully packed (which is more ordinary); and, of course, the atmosphere created by the words themselves — formal and serious versus informal and chatty.

EDITORIAL

Engineering for architecture: there's nothing to it but people

Said architect Lew Davis at our Round Table on energy conservation: "It's become so easy to be a good architect. All you need is good clients—and good consultants. We rely on our consulting engineers, and when new forms are required (as for energy conservation) we will rely on them to come with us and produce the new forms."

Well, Lew, who with his partners tackles some awfully tough jobs, does make it look easy—as many top-rank architects do. He also makes a point. The best architects know how to make the best use of their consultant engineers, and they know how to turn those engineers on so they do their very best work. I'd bet anything that on a Davis-Brody job the working arrangement is not between an architect and an engineer, but between Lew and Sam (Brody) and their friends/engineers Marvin (Metz), Jim (Leon), Bob (Rosenwasser), Dave (Geiger), and Art (Zigas).

Sure there's a contract—there's also a mutual commitment to give the client the best job that the architects and engineers working together know how to design.

Enthusiasm works! In his introduction to the article (page 100) on the work of KKBNA, engineers in Denver, senior editor Bob Fischer wrote: "In the course of reportorial conversations, the editors were struck by the energy and perceptiveness seemingly common to all members of the firm, and their unmistakable enthusiasm for their work. Our curiosity prompted us . . . to interview the firm's partners and associates, and some of their clients, to find out what accounts for the high quality of their work—and just why they have so much fun doing it." There's a chicken and an egg there!

In another introduction—to the case study section beginning on page 66—associate editor Grace Anderson wrote: "What becomes evident as one reviews the projects on the following pages is that there are a lot of people around with a sizable store of technical expertise—not only architects and engineers, but contractors and manufacturers as well. Talking with contributors to this section," Grace writes, "the editors also noticed the sheer enjoyment these experts take in tackling a knotty problem, whether it's big or little, and the great satisfaction they find in helping to make a building look more beautiful, or work more efficiently, or go together more simply, or cost less money."

I just finished reading—and making a few editor's hen-tracks on—the article on Frank Bridgers' work on solar energy. Having read more than my share of articles—in the popular and professional press alike—on the geewhizzeries of solar energy I approached my first reading of this article, even if Bob Fischer did write it, with a certain amount of . . . well, nervousness. Well, when I finished I had the feeling that I'd heard from an expert—that Frank Bridgers really *knows*!

Well, enough examples to make the point. As I wrote on this page for our first "Engineering for Architecture" issue just a year ago: "We wanted to do this issue because we think the place to search for solutions to our problems in this industry—problems like cost and energy conservation and new scale—is with people." This issue, like our first effort a year ago, demonstrates once again the enormous technical resources that we have available to solve whatever building or design problem comes up, and reinforces the unique relationships of architects to engineers that exists throughout the industry.

Finally, as it was last year, this issue is intended to honor the best work of the best engineers—to give recognition to engineers in building for their absolutely essential and all-too-often unrecognized inventiveness and resourcefulness in working with architects to achieve economical and rational and beautiful buildings.

—Walter F. Wagner Jr

• Some "essential and all-too-often unrecognized inventiveness" takes place in producing an issue like this, and—as I did last year—I'd like to give a little credit where credit is due. The editor-in-charge of this issue is Senior Editor Robert E. Fischer—the chief worrier, the chief gatherer of information, the chief writer on the issue, and (see photo credits everywhere) in chief photographer Grace Anderson did such a fine job of assisting Bob last year that we managed to put her on the staff, so she is now Associate Editor Anderson and the assistant chief worrier, etc. etc.

One-time Associate Editor Peggy Gaskie (who moved to Denver just because she got married, for Pete's sake) wrote the KKBNA article for us with the style to which we were long accustomed. Production editor Annette Nelburn managed to handle this issue with an extra arm she found somewhere; while her regular two arms produced the August and September issues. Muriel Cuttrell worked over and above on most of the handsome drawings in this issue. The issue was designed—I think with great style—by Jan White, and art production was handled by his Son the Design Student, Alex White. *—W. W.*

More great lines from the Round Table: an evocative potpourri

As you have probably seen already, beginning on page 92, is a report on RECORD's Round Table: Towards a Rational Policy on Energy Use in Building. One of an editor's frustrations in editing such an article is the enormous amount of thoughtful comment which gets edited. The transcript of the day-long meeting was 269 pages long, double-spaced, and clearly much worth hearing had to be left—as the film makers say—on the cutting room floor. Herewith, with no attempt at organization, some of the most evocative comments.

... **Paul Greimer of EEI on utility problems:** "The problems are serious. We are a highly capital-intensive industry, and with the cost of money going up and the scarcity of capital increasing the problems get more and more serious. Add to that the environmental constraints we have to deal with—the siting problems. And then there is the problem of shortages and choice of fuels.

"I looked has now set up a source-evaluation committee—better known as 'the hole-in-the-ground committee'—to study the whole problem [of where the energy is to come from].

We are studying the availability of fuels, the various environmental impacts, the economic impacts, the mix of various fuels at various times, and finally the mix of usage in buildings.

"In the absence of a true national energy policy, we have an energy conflict and we are all seeing it."

... And Mr. Greimer pointed out that different utilities have different problems: "You take the load profile on any particular utility company and it will be very different from another utility.

Most of the major metropolitan utilities are summer-peaking—even in the northern climates. Some still have winter peaks. I will say that the industry is looking at peak-load pricing to try and level off those peaks and fill in the valleys. Inverse rates to penalize the heavy-users? Probably just for residences."

... **Arthur Diemer of CC&F Property Management on developing a sense of urgency among users:** "My problem as an owner-manager is to translate the urgency and seriousness of energy conservation to our tenants. At the peak of the energy crisis, practically everyone adhered faithfully to the 55-mph limit. But it took only four months before everyone started to change back to 65. . . . There was a noticeable reduction in energy consumption in buildings during the gasoline shortage, but our records for late last year and this year show consumption climbing again."

... **Charles Ince of FEA on the need for public commitment and education:** "Our concern is that the public really believe there is an energy crisis. In Washington, when the embargo was on, the growth rate was four per cent. It is already up to eight per cent again.

"I am not convinced that an energy-conserving system has to cost more. The technology exists. It is a matter of understanding that the technology must be used, of getting incentives or disincentives. . . . The Federal policy in the building field is absolute conservation. It is cutting back the consumption of energy used in the construction of buildings and in the operation of buildings. We have been looking and will continue to look at long-term programs that will have a significant impact. Here I am not talking about standards, but about an amount of money and time—and no one has much spare money or time to spend these days." The tuition will be $400.

What do we offer worth $400? Please take the time to dig back into your July issue and look at the mammoth fold-out on page 65. It gives you in far more detail than I can here exactly what we think is worth your $400 and your time. Bill Marlin, ex-competitor and now competitor who's done the organization for the conference, has assembled a truly extraordinary roster of speakers and panelists to tackle the subjects that are closest to the heart of the informational, educational program. And that is clearly needed because at your 1971 Round Table you were debating many of the same issues that we have today."

... **Dr. Maxine Savitz of HUD on government and the private sector working together:** "This era of more expensive energy and lower energy availability gives us an opportunity for new solutions to problems.

"The architect, the engineer, and the building owner will have to work together to develop the best designs and best systems.

"It is an opportunity for government and the private sector to work together to make sure that whatever is developed is technically sound and reasonable to implement. There is not going to be one solution to using energy more efficiently in buildings. There are new buildings and old buildings, and very different building types. These will have to be addressed separately, and by separate means. The government will offer some solutions. The private sector can do a lot on its own—not just with education, but with fee structures and ways of financing.

"There are lots of problems, but lots of opportunities that can be looked at from a positive point of view."

... **Frank Coda of IES on a subject dear to the hearts of architects and engineers:** "The biggest problem for architects and engineers is that they don't get adequately paid for the kind of work involved in a really careful energy analysis. If we are going to have energy conservation, we are going to have to start treating professionals as professionals and pay them for the work that needs to be done."

A promotional-type word about RECORD's "Resources 76" seminar in October

In this issue with its special emphasis on engineering permit me this special message to engineers on RECORD's 76—the crash course on getting work in today's climate—which RECORD is holding Monday through Thursday, October 27th through 30th, at the Center for Continuing Education of the University of Chicago. As I said in an earlier editorial: "This is going to be a workshop—perhaps even a sweatshop. The program starts every morning at 8 o'clock and continues after dinner. We think this concentration of work is entirely appropriate. We're asking you to spend a fair business problem of every engineer and architect—business outlook, legislation, cost control, office efficiency (for small and large firms alike), changing lender attitudes, new market opportunities, and on and on.

I hope you will, despite these troubled times, seriously consider attending. There's a coupon for registration in the July issue; and—since you're a reader—you should have gotten another promotion piece in the mail. If you can't find it, call me (at 212/997-4565) or Bill Marlin (at 212/997-4242).

—*W.W.*

The example from *Engineering News-Record*, left, shows the simple handling of the editorial when placed opposite the inside back cover. This is an old, established position in the publication and all readers are familiar with it. The position itself can be relied upon to attract the attention it requires (especially since the opinions expressed in the editorials in this specialized newsweekly are of vital importance to the readership). This attraction is, in fact, so strong, that the page can be relied upon to pull the readers through the issue. And the makeup of the page need not be flamboyant for the same reason, so a straightforward two-column format using large type for easy legibility is satisfactory, especially since it allows full use of the available space.

Encourage energy development

The economic measures proposed last week by the President contain nothing to warrant dancing in the streets. But one can take heart at the move to at least try something different (p. 20).

How much of the present economic malaise arises from energy-related problems is an unanswered question. But certainly it is a substantial part. For that reason and others, there is cause for optimism at the President's recommendation that we unshackle and encourage those who would push development of additional energy in this country, not only new sources but coal-burning and nuclear powerplants as well.

Removal of unneeded obstructions to powerplant financing and construction could create new jobs and move the U.S. toward energy self-sufficiency.

Contrary to what some of the back-to-candlelight enthusiasts seem to think, we can't just quit building powerplants and make do with what we have. Energy conservation will be necessary just to stay solvent during the years immediately ahead while we gear up to exploit the resources available to us. And conservation is likely to become a normal part of our life style in the future. But it won't stretch today's energy enough to take care of 50 million more persons.

That is the approximate increase to be expected in U. S. population in the next 40 years as a result of the growth momentum left over from past baby booms. That estimate presupposes that the country will sustain a low fertility rate from now on.

Food, clothing, shelter and other necessaries of modern life for those extra people will take lots of power. There is no way for a society with the numbers and concentration we have today (both intensifying every year) to provide for itself except through the energy-hungry industrial system that has been evolving in the western world for the past 200 to 300 years.

The President seems to understand that. Congress and the public should understand it too and insist on liberation of our own energy resources from unrealistic restraints.

Encourage energy conservation

President Ford's proposed standards for housing and buildings come on the heels of some state and local actions already in legislatures or passed to conserve energy (p. 21). But if this country is serious about conserving energy and becoming independent of foreign suppliers, national standards adopted and enforced through the states is one way of doing it.

The standards for one and two-family housing will probably come from existing standards used by the Department of Housing and Urban Development.

The standards for apartment, office and industrial buildings are yet to be written, but one guideline mentioned is the standard the American Society of Heating, Refrigeration and Air-Conditioning Engineers (ASHRAE) is working on. This standard in its initial draft was given to ASHRAE by the National Bureau of Standards for review and further input. While both the General Services Administration and the Federal Energy Administration have already issued their own guidelines to conserve energy in government buildings, the ASHRAE standard has been researched to a much greater extent and has had input from thousands of industry sources. It is the only comprehensive energy design standard in existence and should be used as the basis for national standards.

Speeding deepwater oil ports

Two weeks ago a shipyard near Baltimore launched the 1,100-ft-long oil supertanker *Massachusetts*, the largest commercial ship ever built in the U.S. But the ship can't put into any U.S. port because they are all too shallow.

Dredging existing ports to an adequate depth would be, in most instances, economically unrealistic and environmentally disastrous. If the U.S. is to benefit from giant crude carriers like this one, the only way is port facilities standing offshore in deep water.

Backers of at least three deepwater port proposals are ready to request permission from the federal government to build them (ENR 1/16 p. 8). If everything goes as planned, they will be able to file their applications by May 1. Ideally, the federal Transportation Department, Environmental Protection Agency and other federal offices involved in the reviewing process will make every effort to expedite the applications. Should the applications bog down in red tape, construction could be delayed for at least another year.

All the environmental and economic arguments for and against deepwater ports have had ample time to be aired during the more than two years that two of these proposals have been in the wind. The argument that properly constructed and operated supertankers are safer environmentally than smaller ones makes sense. Fewer tankers crossing oceans lower the odds that collisions and spills will occur. Offshore docking of large ships eliminates the risks of spills during lightering, in which deep-draft tankers, while still at sea, pump their petroleum into smaller tankers that can enter inshore ports. Larger-capacity tankers also offer economies of scale in transportation costs.

There's no excuse for unreasonable, additional delays to occur once applications are received. If the government hasn't kept score in evaluating the arguments over the past few years, it should have. If it has kept score, debate on the proposals will be well-documented and concise and the decisions made will be the correct ones.

The placement on page 5 of this Letter from the Publisher (a slight variant of the normal Editorial and, in this publication, supplanting it every so often) shows how a smaller-scale editorial statement can be tied to the staff listing and thus use less space without losing any of its apparent significance.

The masthead, beneath its tinted color block acts as a wall separating the ad on the opposite page from the important text on this page (in the same way that white space does in the example on page 128). Furthermore, the contrast between the small type of the masthead and the larger text type of the editorial makes the large type appear even bigger than it in fact is. The ragged-right setting and spacing between paragraphs gives the typography a different texture and feel from any other page in the publication though the typeface is the same. The signature cut is a slightly more personalized way of presenting the byline than setting it in type, and it is a bit more graphically interesting and decorative.

Color

CHEMICAL ENGINEERING

EDITOR-IN-CHIEF
Calvin S. Cronan / 212-997-2664

EXECUTIVE EDITOR
Robert B. Norden / 997-3877

MANAGING EDITORS
NEWS: Nicholas P. Chopey / 997-2197
ENGINEERING: Frederick C. Price / 997-2358
PRESENTATION & SPECIAL PROJECTS
Joan M. Niimi / 997-3678

NEWS EDITORS
SENIOR ASSOCIATE EDITOR: Mark D. Rosenzweig
ASSOCIATE EDITORS: John C. Dvorak
Basil Katsiaris
Nicholas R. Iammarino
ASSISTANT EDITOR: Larry J. Rota

ENGINEERING EDITORS
SENIOR ASSOCIATE EDITOR: Edward H. Stevmann
ASSOCIATE EDITORS: Steven Darashe
Rod Y. Hughes, Jay Matley, Rose Moller, Jr.

PRESENTATION EDITORS
ART DIRECTOR: Noah Bee
ASSOCIATE ART DIRECTOR: Edward W. Libby
PRODUCTION ASSISTANT: Kathleen V. Nalley
CHIEF COPY EDITOR: Henry S. Gordon
ASSISTANT COPY EDITOR: George Kita

REGIONAL EDITORS & BUREAUS
HOUSTON: James H. Prewett, Wilma Pryfogle
LOS ANGELES: Gus E. Weissmann
DOMESTIC NEWS BUREAUS: Atlanta, Chicago, Cleveland, Denver, Houston/Dallas, Los Angeles, San Francisco, Seattle, Washington
WORLD NEWS BUREAUS: Bonn, Brussels, London, Milan, Moscow, Paris, Tokyo, Toronto
Correspondents in 33 countries in 6 continents

CIRCULATION
MANAGER: Paul W. Erb

EQUIPMENT BUYERS' GUIDE
MANAGER: Joseph A. Callahan

ADVERTISING & BUSINESS
ADVERTISING SALES MANAGER
Thomas H. Kong / 997-6547
MARKETING SERVICES MANAGER
Laurence J. White / 997-3306
MARKETING RESEARCH MANAGER
Bertha Chase / 997-6566
SALES SERVICES MANAGER
Joan Niimi / 997-3511
DIRECTOR OF PRODUCTION
Philip J. Horle / 997-2312
ADVERTISING MAKEUP
William Graham / 997-3696
REPRINTS: Jacqueline Ford / 997-3066

PUBLISHER
Alfred S. Reed

PUBLISHER'S PAGE

The Process of Change

The technology of printing and publishing, just like the technology of chemical engineering, is constantly changing. With this issue, almost a quarter of a million CHEMICAL ENGINEERING readers will be treated to a new graphic design aimed at faster, easier reading.
Since its origin in 1902, CHEMICAL ENGINEERING has undergone many changes to give readers the most advanced publishing techniques, such as computerized photo composition, web offset printing, and lighter but improved paper stock.

Still, CE's approach is not revolutionary. The editorial product, from Chementator to Plant Notebook, remains exactly the same. What we have substantially altered are the visual techniques that help you get the most out of CHEMICAL ENGINEERING. Indeed, you may not even notice some of these changes because they are working best when they are not obvious.

For those interested in technical details, our new typeface is Baskerville, which replaces Times Roman. Baskerville is an "open" face that is noted for its legibility. It results in slightly fewer characters per line, and to make up for the difference we have widened each page and added one line. The result: faster reading, with no sacrifice in number of words per page.

You will find a new logotype on the cover, more emphatic headings for departments, and an improved format for tables and figures. Our design consultant calls it a "coherent graphic image." Actually, we are even more interested in a coherent presentation of news and practical chemical-engineering technology for you, a technical-decision maker in the chemical process industries.

CHEMICAL ENGINEERING's new look is the result of almost a year of study and analysis, not unlike developing a new process system. We started with a conceptual design, evaluated the feasibility of alternate routes, selected the optimum approach, produced a prototype model for debugging, and finally brought the new system onstream.

We hope you'll find CHEMICAL ENGINEERING's new graphic presentation attractive, and even more informative and useful than before. Please give us your opinions, whether good or bad, since it's you, the reader, whose opinions we value the most.

Two Letters from the Publisher: a vertical-half

Split-page makeup, such as in *Midwest Purchasing*, right, is hard to handle, since the competition for attention from the ads on both sides is fierce. But if the typography is clean and neat and a bit "different" (as it is here) and if there is a modicum of personalization by means of a picture and a signature cut, then the material receives the visibility it needs. The headline here should have been a size larger and set in italics to tie it into the text more distinctly.

PUBLISHER'S NOTES

Is the gift really "free" . . . .

Recently several readers have mailed on to me, sales brochures they've received from manufacturers and distributors offering a gift in exchange for an order.

One in particular is a four-color brochure showing gifts available in groups according to the total dollar value of the purchase. If you buy so many dollars worth of the product, you can select from a more expensive array of gifts than if your purchase falls into a lesser price range. In a less-colorful, letter-like brochure, another manufacturer goes on at great length, weaving together words about his product and a portable TV set. Actually, it contains more information about the TV set, one free with every order, than the product.

Our readers know one of this magazine's roles is to serve as a medium of communications between buyer and seller. I really believe this is an important function, and always welcome factual information pertaining to a seller's product, facilities or capabilities to pass on to buyers. This is a legitimate role of a magazine. Another role of this magazine, I believe, is to call attention to practices which affect the free market interface between buyer and seller. Offers of free gifts in exchange for an order fall into that category.

Purchasing managers should make a product and/or supplier decision free from any thought of personal gain. There are enough subjective pressures involved without adding one more. As for the seller, instead of offering a gift to induce an order, why not lower the price of the product. According to the brochure, the TV set offered retailed for more than $100. That's quite a cost savings which could be passed on to the buyer.

George Renard, long time executive secretary of the then National Association of Purchasing Agents, used to say, "There's no such thing as a free lunch." Well, there's no such thing as a "free" gift. One way or the other, in higher cost, lower quality, questionable buying practice, you'll pay.

The bill in Congress concerning the importation of Rhodesian chrome is HR 1287. In 1967, an embargo was placed which prohibited the importation of that product from Rhodesia. That act greatly effected this nation's specialty steel industry. Chrome is a vital ingredient in the manufacture of stainless steel. The embargo was later rescinded. The July Publisher's Notes covered this in detail.

HR 1287 would reinstate the embargo. It should be up for a vote about the time you read this. Because the consequences of this embargo could be ruinous to this nation's stainless steel industry, with a very serious weakening of our defense capabilities, purchasing managers should write their congressman urging a defeat of HR 1287.

Charles Bashien

Publisher
MIDWEST PURCHASING

Ad

The small space remaining on the page after the staff listings and masthead are placed, is used for a short note from the Publisher when it is not being used for Letters. The plain type shows off well against the typographic complexities beneath. The picture always refers to the subject of the note. The reason for using the top of the page is that the top of the page is the most visible and the more important material ought to go there. Thus the masthead was squashed down to the lower area, ensuring that the material on the upper portion of the page gets at least *some* readership. Compare the informality of this page with the formal Editorial page from the same magazine on page 132.

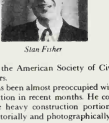
ENR

TO FILL YOU IN

James Stanford Fisher, McGraw-Hill World News Atlanta bureau chief, earned his journalism degree at the University of North Carolina-Chapel Hill and later a master's in East Asian history from Georgia State.

With that kind of education, he probably never expected to end up knee-deep in the mud of heavy construction sites for ENR. But 35-year-old Fisher this week has his second cover on ENR in less than three months.

In addition to this week's feature on the Tennessee-Tombigbee Waterway (p. 16), he reported the cover article on William Sangster, newly elected president of the American Society of Civil Engineers.



Stan Fisher

He has been almost preoccupied with construction in recent months. He covered the heavy construction portion—both editorially and photographically—of the Administration minisummit on housing and construction that was held in Atlanta in September.

Fisher also reported on the projects being undertaken by International City Corp., Atlanta; a three-pager on Atlanta that was actually four stories, an overview plus sidebar stories on architect John Portman's hotel, the Hilton hotel, and Omni International.

Earlier, Fisher was writing about the first use of the reinforced earth system in the U.S. in a marine environment, and he'll have two stories in the Tools of Construction issue (ENR 2/6).

EUGENE E. WEYENETH, *Publisher*

ENGINEERING NEWS-RECORD | *McGRAW-HILL'S CONSTRUCTION WEEKLY—101st YEAR OF PUBLICATION*

Editor, Arthur J. Fox, Jr.

Managing Editor, Joseph F. Wilkinson

Executive Editor, James B. Sullivan

Manager, Business Data Department, Robert H. Dodds

Senior Editors, Charles J. Harding, William W. Jacobus, Jr., E. Allen Soast, Robert J. Stinson, Edward M. Young

Assistant Managing Editor, Howard B. Stussman

Departments

Transportation: E. Allen Soast, Geraldine Galli Loose, James W. Fullilove

Building: Robert J. Stinson, Richard M. Kirlar, David R. Breul, Walter William W. Jacobus, Jr., Rolf A. Fuessler

Management & Labor: Charles J. Harding, Roger Hannan, William F. Campbell

Business Data-Costs, Prices, Markets: Robert H. Dodds

Construction Reports, Polls: Ursula Blakemore, Jonathan Tilden, Judy Strahl, Pearl Herndon, Marie Moravsik, Anna Mary Chan, Christine Galgano, Diane Terrana, Ann Shaperio, Barbara Jackson

Economics, Statistics: Linda Marcotte, Sally Miller, Lorraine Taylor

Cost Trends, Prices, Wages, Indexes: Edward A. Downe, Etta Maye, Dianne Miller

Unit Prices: William G. Reinhardt

Copy & Production: Howard B. Stussman, W. Thomas Erskine, Dolores Ferreiros

Presentations: Harry W. Jensen, Rita Potocny Kruler

Regional Editors, San Francisco: David G. Ellington, Judith H. Dobrzynski; *Chicago*: Edward M. Young

Correspondents, Bureaus: Joan Spano

Editorial Research & Indexing: Gabriella L. Tornay

Assistant to the Editor: Beth Anderson

Planning & Development: James H. Webber

Consulting Editors: Waldo G. Bowman, Nathan A. Bowers

Advertising Sales Manager, James L. Rice

Circulation Manager, Edward F. Bressler

Controller, Business Manager, Hugh J. Carlson

Publisher, Eugene E. Weyeneth

McGraw-Hill World News:

Ralph R. Schulz, *Director*; Albert Wall, *Editor*

Domestic News Bureaus: *Atlanta*—Stan Fisher; *Chicago*—Mike Kolbenschlag, Daniel C. Brown, Dennis Chase, Marcia Opp, Jane Shaw; *Detroit*—William Hampton, Roger Gaines; *Houston/Dallas*—Robert E. Lee, Lorraine South, Nick Hunter, Helen Crawford; *Los Angeles*—Michael Murphy, Barbara Lamb, Darrell Maddox, Gerald Parkinson; *San Francisco*—Margaret Ralston Drossel, Jenness Keene, Robert Yeager, Alan Kennedy; *Seattle*—Ray Bloomberg; *Washington*: Robert Farrell, Bruce Agnew, Muriel Allen, James Canan, Herbert Cheshire, Jerry Edgerton, Boyd France, Charles Gall, William Hickman, John Higgins, Dewer Horchler, Norman Jonas, Wilbert Lepkowski, Donald Loomis, Susan A. Meyer, Daniel Moskowitz, Seth Payne, Peter Philipps, Caroline Robertson, David Scherer, Roger Smith, Lee Walczak, James Wargo, Steve Wildstrom, Stanley Wilson.

Foreign News Bureaus: *Bonn*—Robert Ingersoll; Jon Fedler, Tu Marshall, Silke McQueen, *Brussels*—James Smith; *Buenos Aires*—Ernest McCrary; *London*—James Trotter, Dorsey Woodson, Rov Eales, Donald Edger, *Madrid*—Peter Hoffmann, Andrew Heath, *Moscow*—Peter Gall, *Paris*—Manuel Johnson, William Kosman, Richard Shepherd, Michael Sullivan, *Singapore*—Colin Gibson, *Tokyo*—Michael Mosley, Peter Rutledge, Jan Wakabayashi, Shota Ushio, Marvin Petal, European Manager: Axel Krause, Economic Correspondent.

Chief Correspondents: *Madrid*—Dominic Curcio, *Stockholm*—Robert Skole, *Zurich*—Laura Piliarik.

Correspondents in 90 principal U.S. cities and 70 foreign cities.

Published weekly, with an additional issue the last week of April, by McGraw-Hill Inc. Founder: James H. McGraw (1860-1948).

Subscriptions to ENR are solicited only by paid subscription. The publisher reserves the right to accept or reject any subscription. Subscribers to ENGINEERING NEWS-RECORD, Construction Methods and Equipment, and other professional interests in construction and building. Position and company connection must be indicated on subscription orders issued to address more than one subscriber. Subscription rates for individuals in the field of the publication: U.S. and possessions, $14.00 per year; single copies, $1.00 each. Canada and Pan-American countries, $15.00 per year; single copies, $1.00 each. All other countries, $20.00 per year.

Executive, Editorial, Circulation and Advertising Offices: McGraw-Hill Building, 1221 Avenue of the Americas, New York, N.Y. 10020. Phone: (212) 997-1221. Teletype: TWX 710-581-4879. Cable address: McGRAWHILL NEWYORK. Second-class postage paid at New York, N.Y. and at additional mailing offices. Copyright © 1975 by McGraw-Hill, Inc. All rights reserved.

Officers of the McGraw-Hill Publications Company: John R. Emery, President; Allen Turnbull, Executive Vice President—Administration; David J. McGrath, Group Publisher; Vice President: Senior Vice Presidents: Ralph Blackburn, Circulation; Walter Boyd, Editorial; John B. Hogbood, Controller; David G. Jensen, Manufacturing; Nicholas J. Biddle, Marketing; Jerome D. Luntz, Planning & Development.

Officers of the Corporation: Shelton Fisher, Chairman of the Board and Chief Executive Officer; Harold W. McGraw, Jr., President and Chief Operating Officer; Robert L. Bandy, Group President; McGraw-Hill Publications Company; Robert N. Landes, Senior Vice President and Secretary; Ralph J. Webb, Treasurer.

Unconditional Guarantee: The publisher, upon written request, agrees to refund the part of the subscription price applying to the remaining unfilled portion of the subscription if service is unsatisfactory.

Subscriptions: Send all correspondence, change of address notices, and subscription orders to Fulfillment Manager, ENGINEERING NEWS-RECORD, P.O. Box 430, Hightstown, N.J. 08520. If possible, attach address label from a recent issue. Please allow one month for change of address to become effective.

Postmaster: Please send Form 3579 to Fulfillment Manager, ENGINEERING NEWS-RECORD, P.O. Box 430, Hightstown, N.J. 08520.

Which is better: careful balance or apparently random arrangement?

Two approaches to the same problem: how to handle an editorial placed on the first-right page of the feature section (see the next chapter for more on this). Which is better?

House & Home's solution, right, with its small logo and dateline signaling the start of the feature section as well as dignifying the editorial page itself, and with a box around the entire space, reflects the logic and design-conscious makeup of the entire publication. There is no element out of place, nothing that has not been deliberately placed just so. Is it exciting? By itself, perhaps not. But in its context, it most certainly succeeds in drawing attention to itself, and, having done so, it succeeds equally well in imparting its own aura of seriousness and dignity to the overall editorial product.

Scientific Research's solution is just as successful in attracting attention to itself, because of both its informality of arrangement and the cartoon, of course. But the context in which the page appears is totally different from that of *House & Home*. Here is a biweekly newsmagazine using standard three-column makeup throughout, quite rigid and neatly organized, but obviously not nearly as design-conscious as *House & Home*, which is essentially a picture magazine. So for *Scientific Research* the contrast between the random-height columns (which are slightly wider than the normal ones) and the usual full-height ones elsewhere is striking.

Editorial

It's a freewheeling business you're in, but . . .

One of the things that makes real estate a vital, dynamic field is the opportunity it offers to the entrepreneur. An individual with an idea, some flair, enough drive and a little luck can create a big, successful enterprise out of almost nothing.

But there are other—and less desirable—possibilities.

Success may breed in the entrepreneur a blind belief that the intuitive, seat-of-the-pants way of operating that shot him to the top is the only way to go. So when the need arises for a systematic approach to some phase of his operation, he rejects it out of hand.

Or, success may convince him that he has found the one and only path. So he locks himself into that way of thinking or operating and refuses to budge.

The result is that while real estate—and especially the housing portion of the field—is the freest, swingingest industry of any, it is at the same time the blindest, most hidebound and slowest to grasp new concepts.

The entrepreneurial dichotomy is highlighted by the first two articles in this issue of Housing & Home, both of them dealing with the rental market. For example:

It is generally accepted that the current ratio of interest rates to obtainable rents makes it unfeasible to build rental housing. But a number of apartment developers have discovered that if you stop thinking of renters as second-class inhabitants of minimum cubicles and start thinking of them as people who, while they may prefer renting to owning, nevertheless want much of the same lifestyle as owners, you can open up a very feasible market. Or:

When the apartment-construction market was strong and maintenance costs were low enough not to cut deeply into profitability, most apartments were managed on a sloppy, it-doesn't-matter-too-much basis. But now that maintenance costs—especially for utilities—have gone through the roof, that sloppiness has become ruinous. It can be eliminated only if apartment management is turned into a systematized operation that keeps track of every nickel spent.

None of the foregoing should be construed as an argument for crowding out the entrepreneur—or for turning firms into facsimiles of large, over-organized and inflexible corporations. The record of such corporations in the housing field is conclusive proof of where *that* approach leads.

What we are suggesting is that the successful entrepreneurial approach must also be a flexible approach. Some areas of the builder's operation should be run on a freewheeling basis—in particular, finding new markets and new ways to serve old markets. Others must be tightly, even rigidly, organized. And all areas are subject to change.

—Maxwell C. Huntoon Jr.

So, *House & Home*'s editorial is a formalized page in informal surroundings and *Scientific Research*'s editorial is an informal page in formalized surroundings. Neither of them is "better" than the other, because they both do their job well. But if they were exchanged, neither would any longer do its job as well. Here is an example of the necessity to see the publication as a product — with a total character — and use the graphic means that will reinforce that character and make use of its potential to the fullest extent possible.

EDITORIAL

To avoid 1984

The average person feels disturbed and suspicious about the growing encroachment of the digital computer on his daily life —and with good reason. In our report on computers in research in this issue, Bell Labs' George Hamming warns (see page 54) that the nightmare image of the computer as an omnipotent monster forcing a totalitarian society on us could well become a reality by the end of the century.

Of course, as Hamming points out, the digital computer—like nuclear fission—is inherently neither good nor evil. Obviously, it is how mankind chooses to use computers that will determine their effect on society. For computer systems that interact with human beings, the key question will be whether the system will in each instance be designed to make things easier for the computer—or for the humans.

If computer programmers and their bosses can be persuaded consistently to refuse to sacrifice human freedom of choice and human convenience for the sake of machine efficiency, then, Hamming argues, the computerized society will be considerably more like a utopia than a nightmare.

A happy example in the scientific community of Hamming's advice is the Dartmouth Time-Sharing System (see page 27). This system, designed with the convenience of the inexperienced researcher or student uppermost in mind, marks the advent of practical time-sharing for the mass of scientists. The astounding commercial success of an earlier version of the system encourages us to hope that in free competition people-oriented computer systems will win out.

Unfortunately, a more ominous threat can be expected from those quarters in which competition does not exist—government and quasi-government agencies. If no one has yet succeeded in persuading government or corporate bureaucracies to consider individual freedom and convenience in designing such simple things as application forms, how, then, can we hope to preserve our personal freedom in the age of computerization?

For scientists, the struggle with government agencies over the use of the computer is already in full swing. On page 36 we report how the government is dragging its heels in changing the procedures used in charging computer time to research grants. Now geared to machine-oriented batch operation, the accounting system must be changed to accommodate user-oriented time-sharing and multi-programming operation.

If ever an ombudsman was needed to safeguard individuals against the abuses of the civil servant, it is in this new area of the computer programmer. We suggest that the Nixon Administration think seriously of creating a new office to carry out this ombudsman function. We also suggest that the office be heavily staffed with scientists (including social scientists)—for scientists invented and developed the computer and are in the best position to give advice on what it is able to do.

Kiyoaki Komoda

Two examples of prepared formats into which the editorials can be dropped

The two examples are from Brazilian magazines and both include the masthead, etc. The one at right places it in the gutter, tying it to the rest of the page by complex boxing/shadowing rules (which are a natural graphic outgrowth of the logo lettering — a typeface called Pioneer). The one opposite places the masthead at the foot of the page, like a footnote, and devotes the top part of the page to the editorial statement.

The advantage of such strong shapes is twofold. First, the recognition value is immediate since the reader becomes familiarized with them quickly. Second, it becomes a simple process to write the editorial and drop it into its space without having to worry too much whether the page is "designed" correctly; it removes the necessity of redesigning the page every issue. Obviously it is hoped that the format does not become a straitjacket and that the number of words allowed (given the common sense amount of leeway) works out about right every time.

ENGENHEIRO MODERNO
INDUSTRIAL

VOL. IX — ABRIL 1971 — Nº 7

Diretor do Conselho Diretivo
Robert T. Lund

Diretor de Redação
Alípio do Amaral Ferreira

Coordenador Geral
Sérgio Carrera

Redatores-chefes
Isabel Kumpera EM/Construção
Alfredo Leão EM/Indústria

Pesquisa Editorial
Cília de Leão Bensadon

Assistente Técnico
A. C. Amorim

Correspondente no México
Hugo A. Brown

Secretária
Maria Dulce de Oliveira

Fotografia
Windsor Borges e José Prezado de Jesus

Diagramação
Marco A. Teixeira Reis e
José M. Martins

Produção
Antônio Carlos F. dos Santos

Revisão
Nanzino D'Oliva

Depto. Comercial, Osvaldo K. Nakamura, Gerente de Desenvolvimento; Francisco A. Dolce, Gerente Administrativo; Helio C. Faccin, Gerente de Projetos Especiais; Maria José Campagnolo, Assistente — **Publicidade no Rio de Janeiro:** Cláudio Ribeiro de Lemos — Rua Mayrink Veiga, sobreloja, ENGENHEIRO MODERNO EDITADA POR T/L — Publicações Industriais Ltda.

Diretor Presidente: Robert T. Lund
Diretor Gerente: R. Christophel Lund

Rua Brigadeiro Tobias, 356, 4.º andar. Tels. 227-2417, 227-3658, 227-3971, São Paulo, SP — Caixa Postal 5069, São Paulo, SP — **Filial no Rio de Janeiro:** Rua Santa Luzia, 778, Cj. 601 — Tel. 222-3642, Rio de Janeiro, GB.

Administração: Ademar A. Vitoriano.

Ambiente da Gerência Geral: Dulcy Q. Perricali. **Representante no Rio Grande do Sul** — Impar Representações Ltda. — Rua Dr. Flores, 340, 5.º andar, Porto Alegre, RS. Tel.: 24-6011 — Porto Alegre — **RS. Representante no Paraná e Santa Catarina:** Roberto, Peixoto de Souza — Representação Vendas de Publicidade — Pça. Zacarias, 25 — 25.º — Tel. 23-2373, Curitiba — PR.

Representante no Exterior: World Marketing Services, Inc., Larchmont, New York.

Diretor para a Europa: Peter de Zeeuwe — 28 Great Queen Street — Kingsway WC2B 5BB Tel.: 01-242 4346, Cables: Modern London WC1. **Circulação:** M.Q. — Mercados Qualificados Ltda. Toda correspondência referente a pedidos de assinatura e mudança de endereço deve ser dirigida à Circulação de ENGENHEIRO MODERNO — Caixa Postal 5069 — São Paulo, SP.

Engenheiro Moderno Editada e distribuída por T/L — Publicações Industriais Ltda. — Rua Brigadeiro Tobias, 356, 4.º andar S. Paulo, SP. Número avulso — Cr$ 6,00. Número atrasado — Cr$ 7,00. Assinatura anual — Cr$ 60,00. Assinatura para o Exterior, via marítima — US$ 40,00. Via aérea — US$ 50,00.

Membro do IVC

Composta e impressa na Cia. Litográfica Ypiranga, Rua Dr. Alfredo da Costa s/n. São Paulo

EDITORIAL

■ Recentes pesquisas desenvolvidas nos EUA, no campo da comunicação, revelaram que a maioria das citações em textos técnicos e científicos recentes referiam-se a trabalhos de especialistas divulgados nos cinco anos imediatamente precedentes. A caducidade precoce de um grande volume de informações com mais de cinco anos de publicação, atesta a velocidade de "substituição" de conhecimentos, o ritmo da inovação tecnológica e a necessidade de intensificar o esforço de atualização profissional.

A partir destes fatos, a pesquisa mostra que a evolução tecnológica é diretamente proporcional à velocidade da difusão do conhecimento científico.

A vista destes dados ninguem mais pode estranhar a multiplicação e expansão das revistas especializadas, cujo sucesso, naquele país, como de resto em todo o mundo, contrasta com as dificuldades crescentes que enfrentam os veículos que pretendem "contar-tudo-para-todos".

Sensível às necessidades dos leitores, Engenheiro Moderno tem procurado cumprir missão do jornalismo especializado, consciente de que, dentro do processo de modernização tecnológica pelo qual passa o País, o tempo se torna cada vez mais importante e a oportunidade da informação cada vez mais crítica. O mais recente exemplo desta obediência às necessidades de seus leitores e do País está na seção PM — Produtos Modernos. Este mês, com quatro páginas, que serão oito na próxima edição, atestando a receptividade de uma iniciativa perfeitamente enquadrada nas tendências atuais, pois possibilita contato direto entre os que produzem equipamentos e aqueles que vão utilizá-los e difusão ampla e imediata das inovações, tão logo surjam no mercado.

Dinheiro, e mais dinheiro

Há momentos em que um *chairman* precisa sair do pedestal e resolver os problemas do cotidiano. E os momentos de recessão nos negócios estão seguramente nessa condição.

Contudo, o difícil é identificar esses momentos, e algo constrangedor — e frequentemente dramático — intervir numa rotina que por anos a fio vai dando resultados para, mediante cirurgias aqui, transfusões ali, oxigenio acolá, deixar as organizações novamente em dia e com boa saúde.

Se Rodolfo Marco Bonfiglioli, nosso entrevistado para o *Artigo de Capa* desta edição (*Os novos poderes de um homem só*, na página 17), tem um mérito na história recente das duas maiores empresas que dirige (a Cica e o Banco Auxiliar), é esse: o de ter sabido enfeixar os controles operacionais do dia-a-dia antes que os problemas começassem a se manifestar.

Essa postura empresarial se dirige para uma controlada limitação do poder dos executivos, no âmbito de cada uma das empresas. Isso pode ser bom num momento em que os problemas parecem exigir respostas mais do conjunto do grupo e menos das partes isoladas que o compõem.

De fato, é muito fácil notar, nesse grupo, uma estrita preocupação com a integração entre a fábrica de conservas alimentícias (que já é, por sua vez, uma operação agro-industrial) e o banco comercial, como uma forma de não desperdiçar munição — seguindo-se isolada na matéria, reportada e redigida por Jorge Wahl.

O que não quer dizer que os arranjos dessa grupo estejam por baixo. Bem ao contrário. Bonfiglioli cunha uma expressão definidora, pelo bom senso e picardia, quando se refere à crise de crédito — e que vale, de resto, para a recessão mais ampla dos negócios. Ele diz: — O problema atual não é a falta de dinheiro e sim de mais dinheiro.

Os homens que decidem no Grupo Gerdau, cujas das empresas enfocadas nesta edição (*Gerdau: a duplicação em 4 anos*, na página 28), às voltas com o empresente problema da expansão nas indústrias siderúrgicas, talvez concordem com Bonfiglioli.

Quem se dispõe a investir num panorama de um certo desalento geral em relação ao futuro certamente tem de responder, antes, às perguntas cruciais: É hora de crescer? Como projetar o crescimento se os custos se inflacionam rapidamente? — e, mais especificamente: Como pensar em investimentos se o dinheiro é um produto a cada dia mais caro e, portanto, mais raro?

Entretanto, aparentemente a direção da Gerdau sabe que os períodos de crise não são sempre períodos de desafio se se acredita no sistema e na sua capacidade de sobrevivência sem rupturas estruturais. E que a crise, para as empresas que contam as que vão sobreviver, é apenas um pedaço na história das organizações.

Editor e Diretor Responsável: Francisco Gerbasi
Diretor de Redação: Victor Civita
Secretário de Redação: Frederico Da Costa Ponto
Redação: Fernando Gualvarães, Jorge B. Wahl, Luiz Antonio Novaes, Maria Beatriz Bittencourt Cadaxo, Paulo Hortênsio Ara, Maria Baccarin e P. R. Barbosa
Pesquisa econômica: Antonio M. Furtado e Maria Elisa Carvalho Santos
Produção: Edson Ribeiro, gerente e Fernando dos Santos
Revisão: Arnaldo Jampolsky, Inês Kalmar e Maria Sonsoles Guerra Piedrafita
Fotografia: José Schiavone, Michel Zabé e Ivo Gonzales
Correspondentes: Roberto Salinas (México) e Alberto Saibin (Argentina)

Publicidade: Sérgio B. Reis, gerente comercial; Antonio Arruda Neto, Fernando Alves, Oswaldo Rodrigues e Ubiratan Ferreira. Rua Mato Grosso, 306 — 9º andar — fone 67-0122 — São Paulo

Sucursais e/ou representantes
Rio de Janeiro: Publicidade Associada Ltda. Avenida Almirante Barroso, 90 — 6º andar — fone 220-2832 e 220-4442
Curitiba: Roberto Peixoto de Souza. Rua Padre Anchieta, 2.594 — 8º andar — fone 24-2070
Porto Alegre: Ricardo Peixoto de Carvalho. Rua Duque de Caxias, 1.205 — 9º andar — fone 25-3518 e 25-1290
Recife: Luiz Fernando de Figueiredo. Faturação e Mala Nacional. Rua Mariz e Barros, 678 — 1º andar — fone 221-0744
Salvador: Rua Alfredo Magalhães, 25 — fone 247-1746
Serviços de Imprensa, Televisão e Rádio: Novacon Ltda. Rua Conselheiro Ramalho, 8 — fone 853-1099

Circulação: Anna Maria Augusto
Distribuição: Dinap — Distribuidora Nacional de Publicações Ltda.
Impressão: Cia. Lithographica Ypiranga. Rua Cel. Lisboa, 989 — Vila Mariana — fone 549-1211 — São Paulo
Fotolitos de Capa: Fotolito Bandeirante Ltda. Rua Cel. Lisboa, 989 — Vila Mariana — fone 549-1211 — São Paulo

EXPANSÃO — A Revista Brasileira de Negócios e Economia foi premiada pela Associação Paulista de Críticos de Artes (APCA) como a melhor revista de 1973, e pelo Instituto de Engenharia de São Paulo como a melhor publicação técnica de 1973.

EXPANSÃO — A Revista Brasileira de Negócios e Economia é uma publicação quinzenal de editores de empresas, dirigida exclusivamente a esse público que se avoca cada dois números e foi especialmente em todo o território nacional. Número avulso: Cr$ 3,00. Assinatura anual (24 números): Cr$ 60,00. Assinatura anual de diretor: Cr$ 100,00. Redação e Administração: Rua Cel. Lisboa, 989 — Vila Mariana — fone 549-1211 — São Paulo — Caixa Postal 8.656 — End. Telegráfico "EXPANSÃO" — Telex (011) 2.206 — São Paulo. Exemplares não serão devolvidos.

Publicado por Publicações Expansão Editorial Ltda. Rua Cel. Lisboa, 989 — Vila Mariana — fone 549-1211 — São Paulo — Caixa Postal 8.656 — End. Telegráfico "EXPANSÃO" — Telex (011) 2.206 — São Paulo. Sucursal: Rua Visconde de Inhaúma, 58 — 5º andar — fone 224-6148 — 20000 Rio de Janeiro, GB

Diretor Superintendente Victor Civita
Diretor Administrativo Thomaz Souto Corrêa
Diretor Comercial Hamilton Bruni Pinotti
Gerente Financeiro Roberto Gallina
Assistente da Diretoria Roberto Bruni Pinotti

editorial

Assaying "a journal of design and creative living"

letter from the publisher

Two editorials in the same issue; similar in style, identical in graphic raw materials, yet has different effect and tone of voice!

Architecture Minnesota, Bruce Rubin

Editor's letter

International Management, Peter Tait

Editorial

Raising the Questions

Boldface, Sira Sims

Photos illustrating background of major story ... typographic symbols illustrating headline

"With all the getting get understanding"

Fact and Comment

By Malcolm S. Forbes, Editor-in-Chief

WHERE'S THE ECONOMY GOING TO BE AT THIS NEW YEAR'S END?

I won't know [illegible] this time tomorrow.

As the beginning day rolls along up will be anywhere more—will more/or those those those those [illegible].

Two or three downers though, will make for the true one's and the [illegible] total, hotels might days, for [illegible] some close. The [illegible] may will get on how [illegible] reduced, [illegible] [illegible] [illegible].

MORE OF THOSE COMMENTATORS WITH CASH IN THE HAND

or an appreciably smooth [illegible] this [illegible] [illegible] better [illegible] [illegible] [illegible] [illegible] [illegible].

Truly, before The Bank saw the [illegible] [illegible] [illegible] [illegible]

MULTI - PURPOSE PAGES

Technology
OPINION
Technology
Wake up USA:
It's time to get moving again
A

High Technology, Virginia Murphy Hamill

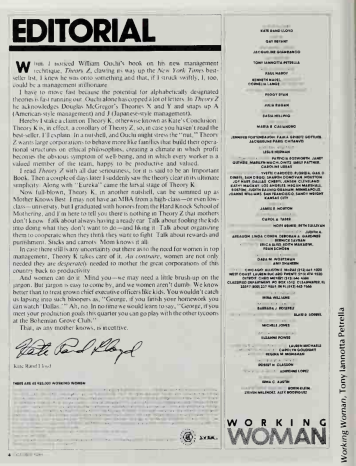
TACTICS FOR THE EIGHTIES

Luxe, Alex Sanchez

Three right-hand ↗ and three left-handy pages: mastheads usually close to gutter; note variety of material accommodated

WINDOW SEAT
Coming to Terms With Fantasy

Travel & Leisure, Adrian Taylor


EDITORIAL

Working Woman, Tony Iannotta Petrella

LAST-LEFT IN BOOK

St. Raphael's

Better Health

November/December 1980

To our readers

S

Better Health

Better Health

Sister Lucie Viguerie

Contents

Features | Departments

1 | 14

2 | 30

3 | 31

4 | 32

5 | 33

6 | On the cover

24

Better Health, Richard A. Craig

Editorials

A big year for savers

The first year of the Reagan Administration has brought extraordinary changes in the ground rules of personal finance, as well as in the balance between investment and consumption in the U. S. economy. Tax reform has multiplied the rate penalties on saving with substantial increases in taxable wealth—annual review of the investment income, which begins on page 75, shows that ordinary interest, dividends, royalties, and advertisements speculators will all find that the new laws open major new opportunities.

The liberalized Individual Retirement Accounts alone offer such generous tax shelters that they should prove a major source of new capital for the expansion and modernization of U. S. industry. And the across-the-board reductions in personal income tax rates scheduled for 1982 and 1983 will increase the net returns on investments generally. Behind the far-reaching from rehabilitating old dwellings to speculating in financial futures, there are specific, sometimes little-known, provisions that will make all sorts of deals more appealing on an after-tax basis.

Most investors, however will have to resist an instinct to run for cover at the same time in the hope of preserving their savings. The U. S. is going through 1982 gripped by a painful recession and faced with the likelihood of further gains in the economy for at least nine months. The determined effort of the Federal Reserve to bring the growth of the money supply under strict control is no less painful because it is long overdue. And in spite of the rising rolls of unemployed and the virtual collapse of such key industries as autos and housing, the Fed cannot yet loosen the monetary reins. It must convince consumers and investors alike that inflation is winding down. Otherwise, all the efforts of the Reagan Administration to promote capital formation will be washed out in a rush to get out of the dollar and into goods.

Taxes such as these are hard on investors' nerves, but they are even harder on the nerves of those who think they've finally been satisfied. The rewards the economy offers to investors with foresight and a modicum of courage are greater than at any time in the postwar era.

A tough test of policy

The coming year—the second year in the White House for Ronald Reagan—will be a crucial test of his economic theories and the policies they have produced. Most of the essential items prescribed by supply-side economics are now in place. Substantial tax reform for corporations has already been enacted, and massive tax cuts for individuals are scheduled for the next two years. The rate of government growth has been slowed, and some areas of federal spending has been actual down enough for solid early progress. If the private sector now responds with a vigorous expansion, financed by the new funds the tax cuts make available for investment, then the President and his advisers will get the strong second-quarter recovery they are predicting. If, instead, consumers interpret the dollar and rush to put their money into goods, inflation will pick up speed, interest rates will set new records, and the economy will be threatened with a prolonged depression.

Paradoxically, the response of the private sector will be determined in large measure by the credibility of the President's promise to keep inflation under control and at the same time, the ability of the Administration to check inflation will depend on the economy's response to the gamble. The uncertainty—and feedback relationship—inherent in this situation leaves the President no choice but to stick with the game plan he has chosen. Any retreat on the federal budget or the tax cuts now in the offing will be in danger of touching off a new round of inflationary expectations that will only diminish the remaining chance of a soft landing for the economy. At the same time, the U. S. would take one more step toward solving the long-term energy problem.

Realism at the UAW

The executive board of the United Auto Workers showed a good deal of common sense as well as a willingness to face reality when it voted to allow union representatives to reopen agreements with General Motors Corp. and Ford Motor Co. before the expiration of the current contracts next September. The UAW leadership must now follow up by persuading the heads at GM and Ford that they will lose far more than they will gain by waiting to the last minute to negotiate changes that will help the U. S. producers meet the competition of imports.

The UAW has already made substantial concessions to Chrysler Corp., which was threatened with collapse. But GM and Ford cannot hold their place in the market when Japanese carmakers have an advantage over them of roughly $4 an hour in labor costs. A gap of that size cannot be eliminated in a single move. But long-term contracts with a temporary wage freeze, limited future wage increases, severely restricted cost-of-living adjustments, and realizations in paid time off and health benefit costs could narrow the gap significantly. In return, GM and Ford should offer some kind of job security tied to company performance, perhaps through profit-sharing.

The UAW says that, because of the Christmas holidays, the automakers would resume the GM and Ford contracts to make final decisions on reopening would be after Jan. 1. That is a mistake. The union should begin the process of fact-finding and point out the facts to local leaders. It should make the most of the opportunity. U. S. labor can no longer afford to take the attitude that negotiating for the survival of a company would jeopardize a union's position as an adversary institution.

Business Week, John R. Vogler

Editorial opinion page usually covers several subjects

FORTUNE

The Editor's Desk

Fortune, Ronald N. Campbell

THE LAST WORD

Chris Lombardi

Feeding the hungry world: Some thoughts on food exports

A

The American way

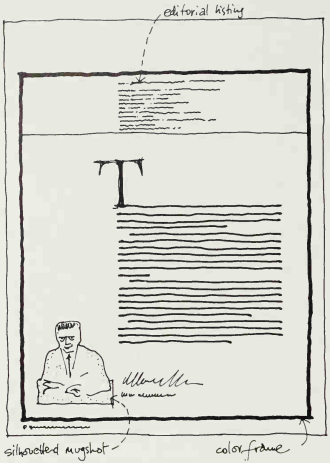
The export market

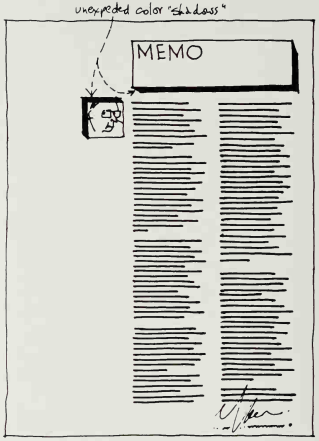
The case of Japan

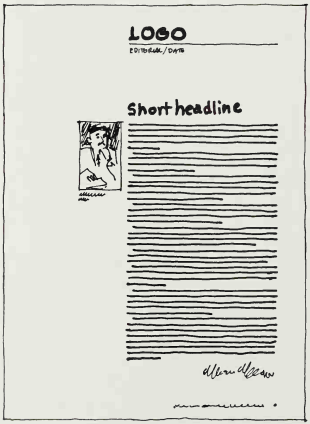
What to do?

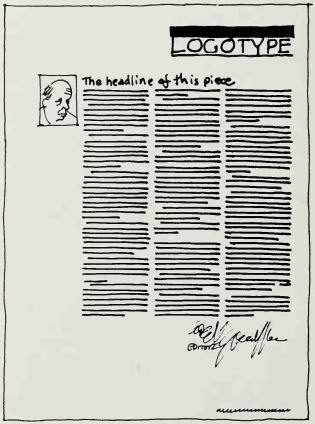
Michigan Farmer, Raymond L. Gibson

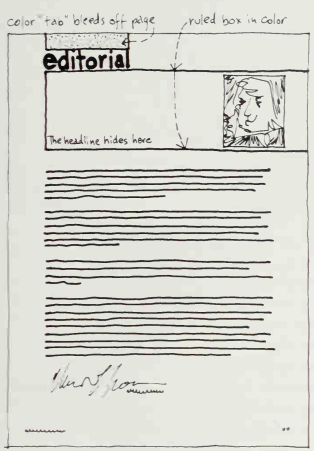
Personal editorial opinion page in tabloid-size publication

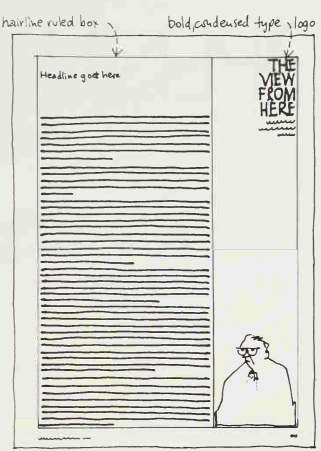

editorial listing
silhouetted mugshot
color frame


unexpected color "shadow"
MEMO

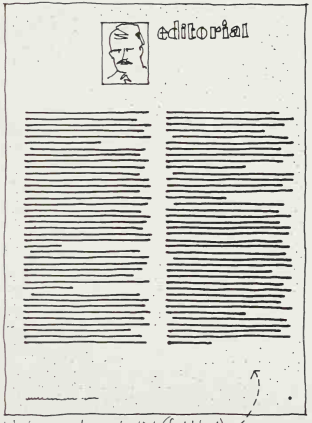

LOGO
Short headline


LOGOTYPE
The headline of this piece


color "rad" bleeds off page
ruled box in color
editorial
The headline hides here


hairline ruled box
bold condensed type / logo
Headline goes here
THE VIEW FROM HERE

the last word
This goes on the last page in the issue


editorial
whole page has color tint (full bleed)

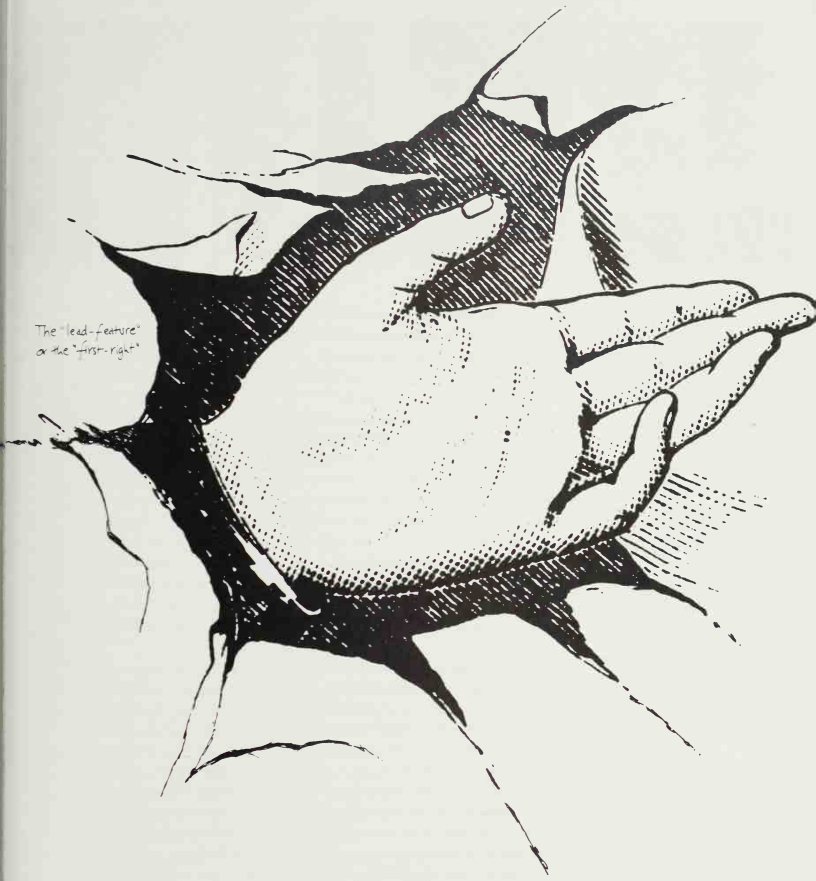
OPENERS

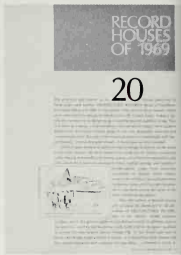
This is a tricky page to handle, but it needs handling well. It announces the start of the feature section — the main and most valuable part of the product. Here is where the editors put their maximum effort and where their work ought to receive greatest visibility and most memorable presentation. So it ought to be started off with a **bang** instead of with a *whimper.*

But the trouble is that the single-page, right-hand opener is small. Constricted. Vertical. And it appears opposite an ad, which requires that the gutter space that separates the two pages be widened. Thus this essential visual buffer encroaches upon the page further, leaving just a narrow vertical sliver within which to display the wares. That is why the page is tricky to handle.

Another consideration to bear in mind: since this is a page that recurs in every issue, there may be good reason to work out some format pattern that can be repeated from issue to issue, creating recognition value that will attract attention, and thus help overcome some of the limitations imposed by the constricted space available. The disadvantage of such a pattern, of course, is that the pattern itself can become a straitjacket, preventing the editors from moving in the way the subject and material demand. The format must therefore be flexible enough to allow maneuvering within a clearly articulated framework of recognition-symbols. (See page 162).

Some publications solve the problem by using the first-right as an editorial page (see p.136). Strictly from the point of view of effectiveness of presentation, this tends to work well. The page can be designed to be a definite break from the ad opposite; it can have a clearly recognizable standard format; it can function nicely as a starting signal. But an editorial page tends to be a weak introduction to a hard-hitting feature section unless the subject of the editorial happens to deal with the same material as the subsequent feature stories. How often does that happen, though? Normally an editorial deals with a subject other than those covered in the feature stories. So you can say that, although an editorial placed on the first-right works well graphically, journalistically it is unlikely to do so, except on rare occasions.


The "lead-feature"
or the "first-right"



Sixteen solutions to an annual problem: has to make the first-right opener of this special annual issue different from last year's, yet share the identical material in just about the same way, in the same proportions every time. (Also in the same typeface, except in one aberrant case in 1972). The purpose of showing these is to prove that ingenuity can be used to useful effect in seemingly hopeless situations.

Perhaps editorials are red herrings placed in the path of clear thought. Perhaps they belong elsewhere. The final decision is dependent on the publication's character, and so it becomes a strategic decision made by the editor in light of clear analysis of the material, market, and goals.

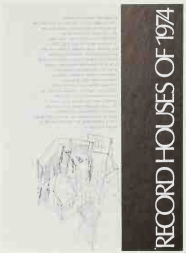
To give the page its required poster value (startling visibility) and tie it in with the feature section for which it is the starter, it should be designed to be as simple and UNbusy as possible. Not only does this mean that the design must be "edited down" to *appear* simple, but also that the elements to be accommodated on the page must be equally edited down to their irreducible minimum. It is perfectly true that *less is more*. The less there is on the page, the greater the likelihood of that which is there being noticed. Extraneous elements obfuscate that one major eye-catching and brain-appealing element that really matters to the story. The result is lack of attention, low impact, failure to grasp an opportunity — and a nasty aftertaste of messiness.

When the material has been edited down to that minimum, the residue must be thought through further in terms that will define the hierarchy of importances: the most important element will probably be the headline (ideally nice and terse, so that it can be set in strong type). The secondary element will be — what: the deck? the byline of the distinguished author? the picture of the author? the illustration? The tertiary element: the text? It all depends. There is no one hierarchy better than another. What matters very much, though, is to articulate clearly what the hierarchy is in each specific instance, so that the designer can express it and pass it on to the reader in easily understandable form. The reader should get an orderly sequence of thoughts instead of an undigested jumble. The very orderliness helps to get the idea across quickly and effortlessly, and it increases the likelihood that the editors will evoke the reader response they want. If the page is a jumble, then the poor reader will have to work his way through it (assuming he'll bother to begin it), and that involves time, effort, and risk. After all, the reader can easily come to a conclusion different from the one the editors had in mind for him — or he can flip the page.

Many publications run a miniature logo, some accompanied with issue date, somewhere at the top of the page. This is helpful in reassuring the reader that this page is, indeed, editorial matter rather than an ad (should such reassurance be needed, although one hopes not). But the second logo has a more important, subliminal function: it helps to define this opener as a sort of secondary front cover, signaling the beginning of something. But there must be enough material following this page to make such a subcover worthy of its name. Twelve pages is the minimum; anything less looks foolish.

The typography of the page ought to be consistent with the pages that follow. It is better to design the page using the graphic materials (type, etc.) used throughout the publication than it is to change them in order to make the page more "visible." Certainly the body typeface and headline typography should be the same, forming a visual bridge between the opener and the pages that follow. The only difference should be a slightly more flamboyant design for the opener. The body copy could, perhaps, be double width (two columns, leaving the gutter column open as a moat separating the matter on this page from the ad opposite). And the copy could, perhaps, start with an interesting initial, or tiny postage stamp-size picture, as a focal point.

Illustrations are, like everything else on the first-right, hard to handle. The opener, by virtue of being an opener and therefore somewhat different from the normal page, is in a position where unusual or atypical illustrations might make good sense: mood shots or background-to-the-story pictures. The trouble is that the more atypical the pictures are, the more difficult it becomes to recognize them as "editorial" matter and the easier it becomes to mistake them for ads. Obviously that sort of confusion ought to be avoided. Such unusual pictures ought, perhaps, to be reserved for use on spread-openers where there is more space available and only editorial matter to rival. On the limited space of a first-right, the precious and unusual picture is likely to be squeezed into insignificance — and thus wasted. Perhaps the ideal place for such a picture is at the very end, as a tailpiece, big and worthily displayed. Besides,



such a tailpiece can also act as an opener to all the many ornery readers who insist on reading magazines back-to-front!

The best illustration to use on the first-right is one that echoes the front cover — perhaps even reproducing the cover in miniature. (Assuming, that is, that the cover and the first story have some relationship to each other.) The reason is, simply, that the front cover image is already established in the mind of the reader as important simply by virtue of being on the cover . . . and therefore it is likely to have quick recognition/remembrance value that is useful in attracting the reader's attention to the page.

But, given the dictates of the small space available, experience shows it is wiser to depend on words rather than images to catch the reader's attention, except in very special situations. On the pages that follow, there are a number of examples of opening page treatments, both with and without pictures, that might be useful as comparisons and idea-starters. Page arrangements should always be secondary, however; the material itself must come first. If the first-right is well edited, well organized, well articulated in its hierarchy of importances, then a logical, expressive, and effective page arrangement will grow out of these qualities naturally.

What about spread-openers? Many publications do not have first-right positions at all, preferring to open the feature section on a spread. The magazines lose the "preferred positions" that sell at premium cost to advertisers this way, but they gain the capability to create greater editorial impact. The scale of the full spread is far larger than twice-a-single-page. This is not just because that necessary river of (wasted) white space in the gutter is now at the disposal of the designer; nor simply because there is no ad across the gutter to fight against — though this is certainly a distinct advantage; but, more importantly, because the shape of the space is horizontal instead of vertical, that is, broad, instead of tall. And a wide space, such as two contiguous pages, is capable of far greater design impact than a narrow, single page. This design capacity is covered in detail in Chapter 2 of *Editing by Design* and need not be discussed here. However, one point is well worth making with respect to the opening of a feature section on a spread: the illustration can have

tremendous impact (by virtue of giant sizing). As a result, such spread-openers can, indeed, be infinitely more effective than first-rights. BUT there has to be a picture worthy of such play every time. This is, alas, not always the case, except in publications whose stock in trade happens to be highly pictorial (such as architectural magazines, for instance). Unless a supply of blockbusters is assured, it is perhaps the better part of wisdom to avoid committing the publication to an opening of this kind as standard operating procedure.

A number of publications have predicated their story openers — including the first, i.e., feature-section opener — on a repetitive series of standardized arrangements, where the left-hand page has a full-bleed illustration acting as frontispiece, and the right-hand page carries the headline and text. This system can work well and is easier to produce simply because the graphic image is smaller. That illustration must be reliably exciting every single time, however. This is the same as saying that the publication must have lots of money available to spend on frontispiece illustrations — and talent and imagination to create them. If these requirements are problematic (and they are for most publications), then this ideal solution tends to be a trifle less than ideal.

If stories must open on left-hand pages, however, there are two possible variations for openers, depending on whether the stories are interrelated as part of a package or whether they are unrelated ones.

If they are related, then everything possible to make that interrelationship evident ought to be done on every opener. The first opener must be designed as a pattern setter, and the subsequent openers must become repetitions of the form at smaller scale, or variations of it, clearly recognizable but differing in detail. An example of both the repetitive and the theme-and-variation technique are shown on pages **168** and **172**. Both are nonpictorial, though both are distinctly visual, using graphic symbols and type to create recognizable character.

If the stories are unrelated, then the first opener ought NOT to be a pattern-setter. It is better to vary the openers as much as possible in format, so that the reader perceives story "starts" as clearly as possible.

Big pictures as openers: vertical barrier

The large vertical picture is an excellent barrier between the ad opposite and the start of the feature section if two conditions exist: (1) the ad must be in color and the picture in black-and-white * so that there is an immediate difference between the two images that splits them from each other, and (2) the direction of the image in the picture itself must force the viewer's eye to the right, drawing it towards the head and text. If the picture in this example were flopped left to right, it would pull the reader's attention towards the ad opposite — distinctly not the purpose of the exercise.

The headline typography also should be quite large, to act as backup attention-getter if the vertical picture in the gutter is missed by the reader who merely flips the pages while holding the magazine by the spine with the other hand, and missing the picture altogether.

THE NEW BOSTON CITY HALL

Now complete except for the square, Boston's great new landmark, begun during the administration of Mayor John F. Collins, will be dedicated this month. A triumph for Gerhard M. Kallmann, Noel M. McKinnell and Edward F. Knowles—three comparatively young and, except for Kallmann, unknown architects who, in 1962, won the chance to build it in a national competition—the Boston City Hall will increasingly become the focus of wide-spread interest and will be evaluated from many points of view.

Those who may be perplexed by the building can be grateful to Kallmann, the eldest member of the team. Some years ago he produced a number of speeches and manifestos, establishing the philosophical, ethical and stylistic criteria by which his work, when he would eventually get some, could be interpreted, understood and judged. The writing of manifestos, as everyone knows, had been almost a daily activity for the founders of the modern movement —masters whom the most gifted young architects quite naturally hope to supplant—but for Kallmann's generation it was a lost art. His was almost a solitary voice because he was among the first with something new to say. Born in Germany in 1915, and like the English-born McKinnell, British-trained, he was known to the British and American architectural avant-garde as a brilliant spokes-

* or vice versa!

. . . or horizontal magnet for the eye?

A large picture used as an enticement for the eye and attention of the reader, must have intrinsic interest as well as size. Just making any old picture big cannot be expected to do the requisite job: the picture must also be journalistically meaningful. If it manages to fill the bill well enough, then the typography beneath it can be quite small, since the picture itself can be depended on to yield the poster effect. The numeral one, here in bright red, is also a subsidiary aid in signaling the start of something (obviously some sort of series). Incidentally, the numbering trick is used so often that it can become a bit of a bore, yet I have never succeeded in persuading editors to substitute A, B, C for the ever-present 1, 2, 3. They maintain that alphabetizing is too obscure a system. One wonders why?

Align

Align

Two elegant new buildings by Skidmore, Owings & Merrill's Chicago office, with Myron Goldsmith partner-in-charge of design, use carefully detailed steel to reflect an existing college campus, and to demonstrate a steel company's products.

1 A NEW MULTI-USE GYMNASIUM FOR I. I. T.

This shimmery, glass-skinned sports facility remarkably maintains its own individuality, yet wholeheartedly echoes the spirit of the well known steel and glass architecture which already exists on the Illinois Institute of Technology campus. A very small site posed some severe space problems to incorporate all the large recreation areas needed. This was solved by building up to three levels below grade: the lower levels contain all locker areas, swimming pool, handball courts and mechanical rooms; the upper level provides for many spectator sports and for convocations.

ARTHUR KEATING HALL, Illinois Institute of Technology, Chicago. Architects-engineers: Skidmore Owings & Merrill (Chicago)—Myron Goldsmith, partner-in-charge of design, Kenneth Muller, project manager, Michael Radic, project designer, Paul Marsen, job captain, contractor: A. J. Maggio Co.

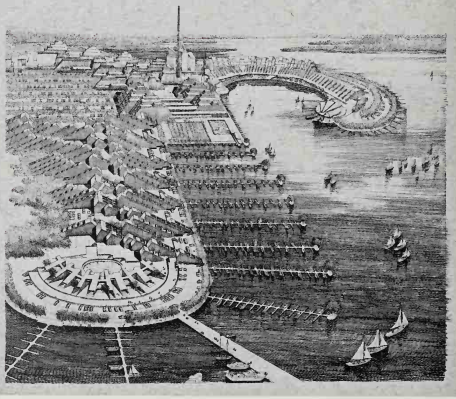
Most effective starting signal: a different stock

There is no question that a colored stock or textured stock insert makes the start of a new section quite obvious. This holds true for feature sections as it does for "flash forms" (see page 82). The book often breaks at this point, and combined with a different stock suggestive of a different product, these characteristics scream for attention. If, then, the material that is displayed on the paper is in fact a little more special than average (such as this, which is an opener to an eight-page album presentation of beautiful drawings) the impact is undeniable.

ARCHITECTURAL RECORD
APRIL 1967

Paul Rudolph's design for Stafford Harbor, Virginia, a new town that will be located on the Potomac about 38 miles south of Washington, D.C., reinforces the natural topography by placing the major groups of buildings along the ridges and harbor, leaving the intervening valleys free.

A new town that conserves the landscape



. . . or, as a substitute, a background color

If a different stock cannot be used because of cost, time, binding, or any other technical or practical reason, then a good substitute can be "homemade" different stock: the regular paper tinted with colored ink, used solid or in tints, or even plain old black, used solid or in tints of gray. The purpose is to create an illusion of differentness, using whatever means may be available. One step higher in sophistication is the use of some sort of pattern as background. (See *Editing by Design*, page 206). To retain the full illusion of separateness, however, it is essential — if obvious — that consistent stock treatment throughout the entire presentation must be retained. You cannot persuade the reader that your pages are of-a-piece if the ink that is supposed to tie them together is pink on one page and purple on another. And, again, as in the example opposite, the graphic techniques applied to the pages must be appropriate to the material disposed thereon. Here, for instance, the pictures are in color against a solid black background — and this is the first of twelve pages so treated. Black background is ideal for showing off color pictures, since it makes the colors appear rich and jewel-like.

What makes people like places? David Kenneth Specter, now a practicing architect in New York, used an Arnold W. Brunner Scholarship of the Architectural League of New York to look for design guidelines in some of Europe's great places, and took hundreds of photographs to show how people react to them. His photographs and commentary in this presentation suggest

SOME ESSENTIALS OF SUCCESSFUL URBAN SPACE

BARE, BARREN, UNCROSSABLE, MERELY EXISTING AS THE "SPACE BETWEEN" . . .

BECOMES SOMEHOW HUMAN, APPROACHABLE, LIVE, URBAN . . .

AND MAY EVEN ACHIEVE A SENSE OF PLACE.

The art of making this happen requires manipulation of both intangible and tangible elements of the urban environment. These elements—though often occurring accidentally—function in predictable and positive ways, and are a legitimate concern of the designer.

Boxing the elements: separately

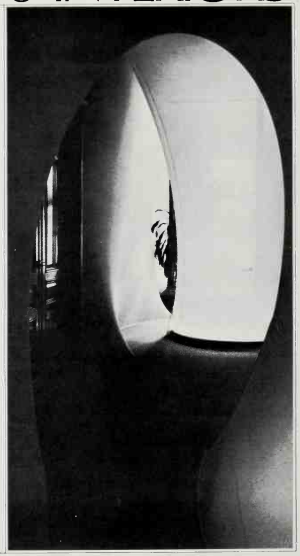
Any sort of pattern that is clearly discernible can be used to make the opener different, and thus, more noticeable. Whatever pattern is established on the opening page, however, must carry over onto the succeeding pages. For the story opener is never seen as an isolated, static unit but as a unit within a fairly fast flow of units (the speed depending on how interested the reader is in the material); thus the opener's individual impact must be reinforced by whatever follows it. Besides, if that opener is designed to be exciting, and the excitement is allowed to evaporate on the succeeding pages, each of those succeeding pages will be thought of as yet another opener; the main opener then becomes isolated and begins to "look like an ad" — and the article's impact is concentrated on one page and turns dull elsewhere.

The boxing in the example at right is "internal"; each element is surrounded with its own box — each box, in turn, becomes part of a bigger box arrangement. The net thus created holds the disparate elements together neatly, unifying them into a coherent image. Shown here is the first of a sixteen-page story in which all elements are encased in hairline boxes similar to the ones here.

Headline in orange/red

6 INTERIORS

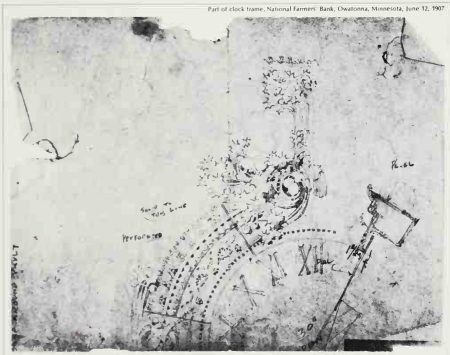
Not too many years ago, the phrase "architectural interiors" could mean little else than four Barcelona chairs and a glass-topped coffee table set precisely into a pristine room. The six projects which follow indicate that such is not true today. The focus, for instance, on architectural matters at the recent NEOCON meeting in Chicago (see page 38 for a report), is an index of the growing interrelationship of interior design and architecture. Furthermore, many offices are now deeply involved in renovation with its heavy emphasis on interior architecture. The question becomes not who is doing what but how well it is being done. Not every person capable of producing such work is an architect, of course, but the standards are high. One such is sculptress Aleksandra Kasuba, whose New York City apartment, (right), not only presents new and dynamic concepts of interior space, but is realized with extraordinary attention to detail. As the next two pages make clear, it is certainly "interior architecture."



...or within a whole page

Given peculiar material of ragged outline, a simple geometric box enclosing the entire page can be used as an excellent foil. Not only is the raggedness-versus-precision an interesting graphic contrast, but also enclosing generous white spaces is an unexpected technique. The boxing formalizes the design, articulating each element, giving each an edge and demarcation line. What could easily appear as a thrown-together group of pages, is pulled together in a formal fashion. This is the first of eight pages enclosed in a neat, unpretentious box like the one shown here.

Pictures in black and brown duotone



Part of clock frame, National Farmers' Bank, Owatonna, Minnesota, June 12, 1907

DRAWINGS BY LOUIS SULLIVAN

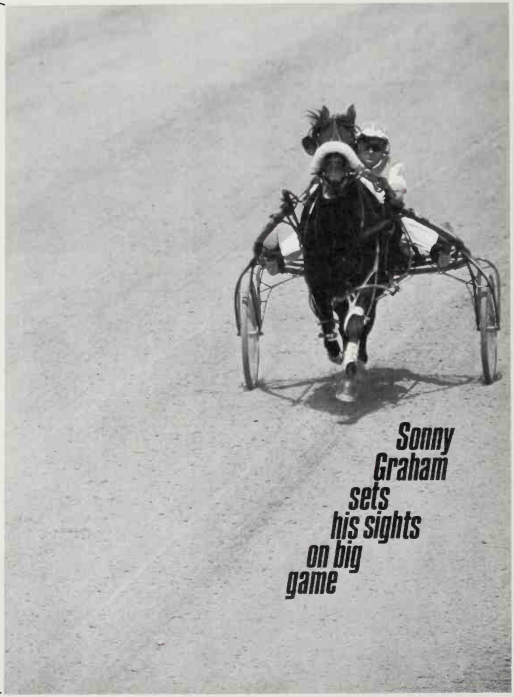
FROM THE FRANK LLOYD WRIGHT COLLECTION, AVERY LIBRARY, COLUMBIA UNIVERSITY

Buildings—even those designed by Louis H. Sullivan—are vulnerable to the speculator, the wrecking ball, and the shifting tides of development. Sullivan lived to see many of his buildings destroyed, but his delicate, poetic drawings live on, treasured and preserved as an important part of a great American architectural heritage. The largest collection was acquired in 1965 by Avery Library at Columbia University and first exhibited publicly in January of this year. In these eight pages we present selected drawings from that collection.

The drawings chosen show one aspect of his architecture that particularly entranced Sullivan—its ornamentation, which became in his hands the ultimate expression of his ideas. Frank Lloyd Wright asked, "Where . . . was there ever a man who *out of himself* devised a complete, beautiful language of self-expression as complete in itself as . . . the period ornamentation of any of the great styles which took so many ages to perfect?"

Full-bleed pictures used as a background for type

Spectacular pictures can be as startling (and thus as useful for openers) as white space or huge type set sideways. If they happen to be color, so much the better. But a good black-and-white can do the job as well. One proviso: if the editors find themselves lucky enough to have such a spectacular picture, they must restrain themselves from spoiling it. They must allow it to speak for itself, merely laying claim to its being "editorial" by adding an inescapable minimum of words. In the example on this page, the only additional material is the headline; the way in which it is handled allows the picture to dictate the style and placement of the words. The strong direction within the picture calls for reinforcement by the use of italics (similar in slant) and their angular positioning (parallel to the direction of the sulky's travel). The type *improves* the picture by underlining the photograph's inherent dramatic qualities.



. . . and as basis of montage design

Using a good picture as a background to create a desired atmosphere, and superimposing upon it additional images as well as the specifics of headlines and blurbs, is another way in which photographs can be exploited. The example shown opposite is, in effect, a montage of five different elements, yet the simple arrangement into which they have been manipulated pulls them together logically so that the page synergistically "says" more than the sum of its individual parts, which is precisely the quality that makes it a good opener.

Both of these examples as well as the next two → are in full color

HOOF BEATS
SPRING
We are now in the season of life, and all living things know it. The new foal cavorting at its mother's side, and the wildly free young colts wheeling at play on a warm mid May April day, feel the pulsing beat of spring-time. It is a time of genesis. Now is born the future king, and so some green shoot of new champion walks today. Who knows his name? Better that we don't, for lacking that certain knowledge you and I can lie back, look at the blue sky, and know full well the champion is here. It's spring! and in this field at least, if nowhere else, all is serene and well with the world.

Two more big-picture/peculiar-headline combinations

An attractive picture of a well-known personality catches the eye, and curiosity makes one turn the page sideways to read the headline. The name is well known to be an attention-getter on its own accord, but the way in which the deck is written describes the man's character and pinpoints what one suspects about him just by looking at the picture. It uses splendid word/picture relationship; the verbal/graphic liveliness makes it an effective opener.

Clint Hodgins

Harness racing's bluff, gruff curmudgeon of the sulky enters the sport's Hall of Fame

If one picture is good, are two better? Only if they can be combined into a startling unit. The montage on page 159 does this by superimposition. The example shown here gains attention by gluing together the elements with strong visual adhesive: the black band between and alongside the photos. The peculiar typography is the extra touch needed to establish the priority in which the reader will examine the several elements. By being peculiar, both in face and arrangement on the page, and by being good and large, the type will draw the reader's attention first. This is desirable, since it is the words that give the clue to the combination of the pictorial images surrounding them. So this one-two, words-then-picture sequence communicates logically, making a very complex page an effective opener.

Standardized recognition flag incorporated within a flexible format

The wide variety of material that must be placed on the first-rights of *Industrial World* demands a loose format with minimum restrictions. The necessity for flexibility is increased by the publication of each issue in English as well as Spanish, so that enough leeway must be allowed in the design to accommodate variations in headline and text lengths.

The varied editorial material makes it necessary to introduce some highly visible and characteristic graphic element to signal the start of the feature section and — more importantly — to do so in a consistent and familiar way in issue after issue.

Hence the introduction of the heavy vertical rule with the logo attached. It is positioned well into the page, alongside the gutter, and is sufficiently strong to allow the balance of the page to be handled in whatever manner the material demands. Five examples chosen at random from the twenty-five so far published using this pattern prove the efficacy of the system.

INDUSTRIAL WORLD
APRIL 1975
Are you ready for the new breed of robots?
Programmable industrial robots like the Unimate model above have many new skills
Industrial robots are staying on the job. Even as layoffs of workers are going on in many industries worldwide, the robots are joining the work force in more numbers than before.
In 1970 there were only about 200 robots at work in the U.S. and about 50 in Japan. Three years later, the worldwide robot population was estimated at 2600. Last year the number jumped to 3500: 1500 in Japan, 1200 in the U.S. and 800 in Europe.
At the 4th International Symposium on Industrial Robots held last November in Tokyo, 300 experts from 18 countries attended. Forty-five robot makers exhibited their models. As host of the show, Japan is demonstrating that it is spearheading the newest developments in robot technology.
Labor shortages and spiraling wages are among the factors that catapulted Japan to the forefront of this industry, reports Fred Saito, Industrial World's contributing editor from Tokyo. Unlike West Germany, Japan has not been able to import foreign labor. Hence robots filled the labor shortage.
Over 75 Japanese companies are now in the robot business, most of them entering it within the last five years. In the U.S., two companies, Unimation Inc. and the Versatran Div. of AMF, dominate. More than 440 of their robots have been installed in Europe and in Japan. Other major U.S. firms are listed in the accompanying table.
Europe's robotmakers. The more notable ones are: Swiss Assembly Products, Hawker-Siddeley, Vaughn Associates, all of the U.K.; in Germany, there are Rheinische Nadelfabriken, VFW-Fokker GmbH, Robert Bosch GmbH; in Sweden, Ekstroms Industri AB, R. Kaukeldt AB, Electrolux AS; in Norway, Trallfa-Nils Underhaug, and Tesa.
Robot experts say that 1975 is the year that will see the entry of a new type or generation of robot, the sensory-controlled machine. In contrast to the standard, widely used pick-and-place robots of the first generation, the newer versions will have a wide variety of sensors to recognize and manipulate work-pieces, parts and tools. The sensors may include pressure, torque, electro-optics, vision, force-sensitive touch or proximity sensors.
Their memory-controlled program movements can be interrupted by closed-looped minicomputers. And their programmed control can be overridden by signals from sensor inputs. Robots of this type cross a new threshold, the ability to manufacture and test products.
15
INDUSTRIAL WORLD APRIL 1975

INDUSTRIAL WORLD
¿Son vuestros metodos excesivamente complicados?
La simplicidad suele producir buenos resultados

INDUSTRIAL WORLD
THE BEST IN PLANT MODERNIZATION
The 10 plants from 10 different countries described in the following pages are outstanding examples of innovative management. Each one includes ideas that may be adaptable to your operation

INDUSTRIAL WORLD
NEW WAYS TO TEST ROOFS FOR LEAKS
Repair work on your plant roof can be costly. Nondestructive techniques such as a radioisotopic meter (above) that reveals trapped water can cut maintenance costs

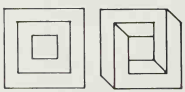
INDUSTRIAL WORLD
Security steps to protect your plant against rising crime

Echoing the cover gives ultimate recognition value to the opener

If a strong and memorable image is established on the front cover, its repetition will surely arouse the reader's interest when he comes across it again. This simple principle is applied to *Hoofbeats'* presentation of its annual profiles of the year's winning horses. The graphic handling is, of course, based on the "impossible figure" frames that appear logically three-dimensional until they are examined more closely and their subtlety becomes apparent. Each frame contains a color portrait of the subject, with subframes for the names and the biographies. The headline typography is equally elusive, since one cannot determine whether one is looking down or up at the lettering. Shown here are the cover, the first-right, and a spread from the story.

THE CLASS OF '74
Here is the class of 1974 as selected by the U.S. Trotting Association's coast-to-coast poll of more than 400 harness writers in the United States and Canada and by the racing secretaries of the 50 members of Harness Tracks of America. Class is that quality that sets leaders apart from those who follow. In horses it can be the tangible factors of speed, earnings and the ability to win the big ones. There are good years and just average years. The year 1974 was a vintage year.
Horse of the Year, Aged Trotting Mare, Delmonica Hanover
Harness racing had a Queen in 1974 as DELMONICA HANOVER was voted best by North America's harness writers. The 5-year-old SPEEDY SCOTT mare became the second trotter to win $500,000 and the second developed by Delvin Miller. Miller trained 1954 winner STENOGRAPHER. Delmonica earned $252,761 in 1974 and raised her lifetime total to $705,789. She won both the Prix d'Amerique in France and the Roosevelt International at Yonkers. Owner Jean Lafargue originally bought Delmonica for $5,000 as a Hanoverian yearling and sold her in November for a record $300,000 at Tattersalls. She will defend her Prix d'Amerique title in January.

All full-color illustrations.
Type and frames in black



Four-Year-Old Trotting Mare: Colonial Charm

COLONIAL CHARM, now the fastest trotting mare in harness racing history, was judged the top 4-year-old trotter of 1974 by North America's writers. In 1973 she won the 3-Year-Old Award and in 1972 Castleton Farm's homebred daughter of **SPEEDSTER DARN YANKEE** was chosen the Outstanding Yearling Filly. Colonial Charm has trained the 30-second barrier mark of the immortal **ROSALIND**, 29 - 1/5's time mile, with her 1:59.1 victory over **DREAM OF GLORY** in Lexington's Kentucky Futurity Oct. 5th. Hooking with Castleton's **STAR'S PRIDE SPICY SONG**, standard and holder of **SPEEDY SCOTT'S** 1:55.4 Red Mile mark, 70's mile year, Colonial Charm won nine times, including the Reynolds, Hoo Ah and Maple Leaf Stakes, and earned $126,440.

Aged Trotting Horse: Savoir

SAVOIR, shown with his veteran trainer **Jimmy Arthur**, didn't win very often this past season, but when he did, the 4-year-old gelding did so with a flair. The Bellwood Stable's son of **STAR'S PRIDE SPICY SONG** captured the $30,000 Hambletonian Stakes, the Kentucky Futurity, **LIER**, and **COLONIAL CHARM**. Four months later he blasted Worlds of the Year, **DELMONICA HANOVER** at Hollywood in 1:59.3 with **Jim Dennis** aboard. Savoir then romped a topsy turvy year with a near-world record triumph in the $138,000 Meadow Skipper Stakes at Roosevelt Raceway. The 5-year-old's 3-heat mile was in 1:53 (one-fifth off the world mark). He had $145,100 in 14 earnings, $693,806 overall.

These examples were picked pretty much at random, and reflect the current widespread practice in the use of boxes, borders, rules, and typographic embellishment of all sorts.

Diagnostic Medicine

The Algorithm That Failed—A Cautionary Tale

Diseases run their course through predictable time. The hour at which you begin your diagnostic studies may therefore delinquent—but frequently, as the case of this protracted lung patient shows

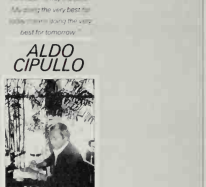
By Henry B. Sobocan, M.D.

Diagnostic Medicine, Cristine Hafner Wong

Single column centered in the page.

"There are times to memorize. Try my the best. My dress the very best for today means doing the very best for tomorrow."

ALDO CIPULLO



Exiting what must be one of the world's smallest elevators into a hockey-stick hallway, Aldo Cipullo is a man of many accessories, all of which look all right. My initial quandary is resolved by Aldo, a statuesque brunette with specks of coal and gradually enters me into the lion-skulling design studio and home of the signature Cipullo bracelet.

Aldo, an exaggerated feline eyes calm and reflect the afternoon sunlight as she pillows her Aldo-size a long distance call and will be with me momentarily. She directs me to a tufted leather couch and offers a beverage. Rome moves through a maze of

Ambassador

Life After 40

REFLECTIONS ON MIDDLE AGE

FIVE VIEWS BY **JANE O'REILLY, WILFRID SHEED, BARBARA GRIZZUTI HARRISON, STANLEY ELKIN AND WILLIAM A. NOLAN.**

TWA Ambassador, Alfred Zelcer

Two narrow columns placed to the right of the page.

A challenge to the environmental zealots

THE SCARCITY OF RAW MATERIALS

BY JULIAN L. SIMON

Atlantic Monthly, Judy Garlan

Two wide columns across the page.

Esquire, April Silver

ESQUIRE

Wheeling and dealing its way into the new decade, the Sixties generation is still dodging the problems of being grown-up

ROLLING INTO THE EIGHTIES

BY SARA DAVIDSON

Who is the rich man?" asks the Talmud. The question has never seemed more relevant. The answer of the sages is:

ON THE BEACH IN VENICE, AMID THE PUBERTY OF PRESIDENT REAGAN'S CHILDREN AND OTHER CITIZENS

Town & Country, Melissa Tardiff

TOWN & COUNTRY

THE WHITNEYS

The six Parks born their 2 children. The Whitneys have scores of [illegible] and [illegible] Social Register, but of all the interlocking families the Whitneys, more than anyone, [illegible] the American establishment. Wealthy, well-connected [illegible] they have long lived in their own [illegible]

BY PATRICIA LINDEN

Three normal columns with daring and conservative displays above.

A WORLD OF THE NEVER-IDLE RICH

"We had such great fun growing up," [illegible] Payne Whitney, the astonishingly youthful-looking granddaughter of Gertrude Vanderbilt and Harry Payne Whitney. "Our parents, [illegible] were the third generation of both Cornelius Vanderbilt and William Collins Whitney, so we grew up in the family fortune-riding Davis pocket. I remember when I was twelve, my father went to England for one of the America's Challenger Cup race from the Royal Yacht Squadron. I was allowed to bring Mr. mother and I [illegible] Vanderbilt cousin in Gertrude Vanderbilt—and my sister Barbara went [illegible] It was a ball because the girls' playpen all lived in the house with us, and we had our own [illegible] aboard and play all day long. I remember [illegible] I was [illegible] and I'm also [illegible] was probably too young to join us. Mostly it was boys I played with as we only two years apart and we were both full of mischief. Our summers were always spent in the Adirondacks [illegible] Saranac Lake, and in the pre-[illegible] Whitney and sister had water skis, and it's always been a family joke [illegible] Sometimes our cousins in the Vanderbilt side, Jimmy and Douglas Fearon would be there and it was like having two more brothers. Tommy and Helen Hitchcock [illegible] were frequent visitors, and Tommy and Jimmy became the fastest ski [illegible]

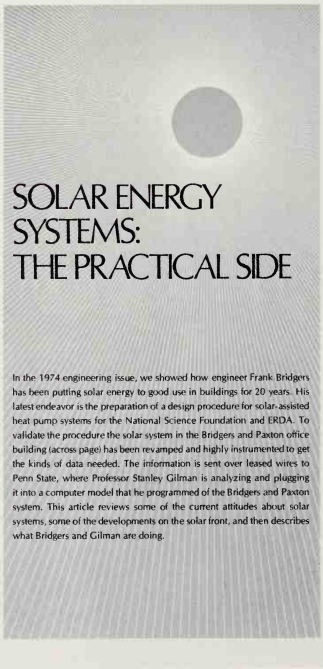
Fighting another Gypsette, Flora Miller points to mink coats on them but insists it's her sassy pastel blouse and pants that [illegible] "I'm not a fur person," she says as she sinks [illegible] and [illegible] She considers the aura of a woman who has spent [illegible] a machine. Money and I both need a lot and when I'd come home on vacation from Foxcroft and be taken to Harvey Cavens, we would just each other with Mother [illegible] Mother [illegible] Mother [illegible] [illegible] girl can see more in the first five [illegible]—that kind of thing. I loved the [illegible] Marietta used to take me to the [illegible] to the Metropolitan where she [illegible] Whitney Museum [illegible] Mother [illegible] [illegible] [illegible]

Spread-openers for interrelated series: the theme-with-variations technique

In a special issue of *Architectural Record* on the relationship of engineering to architecture, each story deals with a particular aspect of the subject. Thus, to tie together the issue, each opener had to be designed within a recognizable format — similar, yet flexible enough to allow each story to be designed in the way the material naturally suggests.

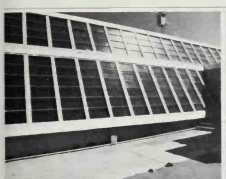
The basic graphic element, the tall box on the left-hand page, is in color or various tints of gray. The text blocks vary in length as required, but are all placed in similar positions on the page for the sake of rhythm. The headlines are all handled differently: some dropped out in white from the dark gray background; others surprinted in black over light gray; the Lighting one is both dropped out and surprinted since the medium gray allows both techniques to be used while retaining legibility. The heads are set in whatever type size seemed right, but all in Optima all caps.

The simplicity and rigidity of the overall shapes is enough to make them stand out distinctly in contrast to the various pages opposite; these latter give some slight indication of the different page treatments applied within the stories themselves, though, alas, the most visually interesting treatments do not show on the openers.


SOLAR ENERGY SYSTEMS: THE PRACTICAL SIDE
In the 1974 engineering issue, we showed how engineer Frank Bridgers has been putting solar energy to good use in buildings for 20 years. His latest endeavor is the preparation of a design procedure for solar-assisted heat pump systems for the National Science Foundation and ERDA. To validate the procedure the solar system in the Bridgers and Paxton office building (across page) has been revamped and highly instrumented to get the kinds of data needed. The information is sent over leased wires to Penn State, where Professor Stanley Gilman is analyzing and plugging it into a computer model that he programmed of the Bridgers and Paxton system. This article reviews some of the current attitudes about solar systems, some of the developments on the solar front, and then describes what Bridgers and Gilman are doing.

Black type over yellow background

Data is being taken on this solar building to validate a design procedure for solar systems

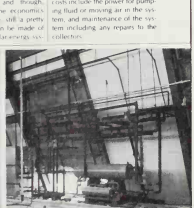


Frank Bridgers comment that he has had more inquiries about solar heating in the last year than in the previous 15 is hardly surprising. What is different about now and 20 years ago, when Bridgers and Paxton built their own solar building, is the escalated cost of energy, for one thing, and the considerable dollar backing for solar energy research by the Federal government for another. Of the 138 solar-heated buildings reported by William A. Shurcliff in his May 1975 survey,* nearly 100 of them were initiated after 1970. As might be expected, most of the buildings are houses, though several schools and office buildings are listed including a pilot project for a 10-story office building.

Solar-heated buildings that work well have been and are being constructed. Technology is not the basic question. The question really is how do the economics work out? Solar-heated buildings are capital-intensive because solar radiation is "low-level" energy. Large areas of collectors have to be provided to collect it, and some means has to be provided to store it to make up for nights and cold, cloudy daytime weather. Even so, solar-heated buildings are competitive now, with conventionally heated ones at present energy costs when there is low-interest financing, as with public buildings. The really tough question is what is going to happen to the cost of electricity, gas and oil in the next 10 years. In 1973, engineer Bridgers estimated a 300 per cent increase in the cost of natural gas by 1990, and a 125 per cent increase in the cost of electricity. Now he views these figures as very conservative.

Though the completeness and accuracy of weather data (solar and temperature) leaves a lot to be desired, though there is no commonly accepted design procedure (right now) for solar-heated buildings, and though, strictly speaking, the economics are far from simple, still a pretty good evaluation can be made of owning costs for solar-energy systems right now. The costs of owning a solar heating system include the amortization of the collector, the storage unit, the pumps and piping (or fans and ducting), and the cost of associated controls. Frank Bridgers reports that the increase in construction cost for buildings with solar-assisted heat pumps in the Mountain States is about 10 per cent for large commercial buildings, and about 20 per cent for small commercial buildings and for houses. A $60,000 house then would cost $72,000 with solar heating. Operating costs include the power for pumping fluid or moving air in the system, and maintenance of the system including any repairs to the collectors.

Data from a weather station and from instrumented equipment in the Bridgers and Paxton building is acquired by a computer and sent to Penn State for analysis.



*Solar Heated Buildings: A Brief Survey (with addition by A. Shurcliff), Cambridge, Massachusetts.

white type dropped out of 70% screen of black

IDEAS

INGENIOUS, BOLD, PLAYFUL

The ten projects shown on these pages, the kind of stories journalists call "short takes," are all buildings that the editors couldn't stand not to publish, even though space was limited. Some impressed us with their inventiveness—an unexpected application of a common material, say, or unusually adroit integration of structure and services. Others we found downright amazing—see the incredible unfolding apartment house on page 124. In any case, the collection demonstrates, if further evidence was needed, the remarkable range of designers' ingenuity.

1 The graceful concrete picnic shelters at Denver's Liberty Creek Reservoir were put in place recently by a helicopter. Designed by Architect Calvert Holdrens, inspired by Robert Roth's sculptures and assisted by structural engineers KERNS devised a reusable form composed of six-feet 1-by-4 timbers, threaded near the base on a pipe. The upper edges were then splayed like a Japanese fan. Rainwater drains through custom scuppers on the fan's spine. Because the recreation area is subject to floods during the spring runoff, picnic shelters and other structures in the park are temporary, needing only leveling and painting to ready them for visitors.

2 The facilities of a Swedenmaker's plant were employed to shape the 'twin weathering steel plates above' park shelters at Yonkers, New York. The perforated hexagonal 'flowers' designed by Architect Richard Dattner were cut from the plates by Nithan steel on flared hexagonal 'stems.' Each flower has six identical segments joined by continuous welds. Welding rods were also weathering steel rendering welds virtually undetectable when ground smooth. Inverted flowers become fireplaces; stems become chimneys. Fabricators were Lynrod Iron Inc.

QUALITY LIGHTING WITH LESS ENERGY

Electric energy consumed by all forms of lighting is substantial—as much as 30 per cent of the total usage. So it is no wonder that government, utilities and architects and engineers are scrutinizing lighting design for energy savings, even at the absence of a coherent Federal energy policy. It is clear in advance that significant savings are achievable. Logically, no single approach is fail-safe; even as an answer to all clients' needs. Fortunately, now the complete arsenal of markedly lower foot-candle levels has not been foisted by arbitrary rational approaches, architects and lighting designers are starting to bring more attention to the different requirements of different tasks, by adopting a greater appreciation of what quality means, in the range of tasks to be lighted, and to why then the objective is "light to see" or "light to work," or both.

This article is directed to the many approaches that have developed to maintain quality lighting with fewer watts. It looks at the gains from lights achieved by fair location of luminaires geometrically with respect to tasks; and to the control of light distribution of luminaires themselves, and also to luminaires with lower watts and improved light distribution. Fresh optical pattern distribution arranged to permit flexible lighting arrangements. Of switching to turn lights off when not needed, and controlled lighting for commercial windows, and for use of lamps with higher efficacies.

• Many ways for design of lighting, either this year and for next to save energy gradually, can be applied to the lighting tasks—and to the luminaires that control light and to the following of good practice. One broad quality, general to all, might be the choice of lighting of task—putting the right light on the right spot.

It took far fewer years for people to understand that the right amount of light on the right task at the right time was the right way to do the task than for something more. Furthermore, the lighting may not be for the convenience of the visual task at the task. The principles are the same for the following two groups, but the problems are far from the same.

Lighting for visual tasks in the home, shop or office does not change frequently. Here the luminaires will rarely move with the tasks above. They can be accomplished in two ways. First the luminaires may be relocated in the ceiling. Second the luminaires can be encapsulated in the ceiling and the lighting moved with the luminaire. (See art-ists' March 1973 and mid-August 1975.)

Both these methods are possible for relocating ceiling luminaires. To a limited extent this is possible with the 6 x 6 angle of low-brightness cutoff allowed by the National Electrical Code for making a connection between rigid conduit and luminaires in accessible air-handling plenums. Flexibility is greatly enhanced though if the flexible cords may be recessed by providing means for plugging in luminaires on the ceiling grid. The Underwriters Laboratories (UL) 20 will take this approach in the case of a prefabricated grid of electrical cavities that plug-in suitably and also supports luminaires and is made of panels. Furthermore the grid conceals spotting piping and has openings for air outlets.

The second example cited herein are provided in the bottoms of concrete floor slabs with underfloor raceways. The luminaires can be plugged into a modular base. Luminaires are supported by recessed-in louvers that are part of the raceway lamps.

In the lighting needs to be fixed in the ceiling, and task locations will change then the only solution is to provide sufficient illuminance on vertical surfaces for all tasks, although this will waste light when tasks are not present. Luminaires can have indirect lighting lines.

Even at that very good general lighting can be obtained for slightly less than 2 watts per sq. ft. For example, as in a classroom tested in the examples on page 116, for both examples the luminaires are louvered, parabolic reflector two-lamps types. These lamp types are designed for horizontal mounting and they are designed to radiate reflected light the preferred viewing direction being parallel to the length of the luminaire.

There has been a lot of talk about the illuminating-engineering society's recommended levels and/or levels. While the presumed quality and also the magnitude of these levels have been questioned by a lot of people in many ways, they have been a useful guide and a representation of a standard for lack of support. The trouble is that a system, in the field have not integrated all the psychology of and physiology of factors that affect human performance and set of being to arrive at numbers that are valid in every respect. Obviously this is a gargantuan task that seemingly has no end, though some research has—such as architect John Flynn's professor at The Pennsylvania State University, are trying to schedule it down to a science. Dr. H. Richard Blackwell's work is also highly most appreciated as according to their preferences rather quantity and patterns of light are suited for certain types of space usages. Dr. H. Richard Blackwell has prepared tables for illuminance levels to account for eye adaptation factors, and the wide but important variation in the effects of aging on visual acuity.

Dr. Blackwell's work reflects the IES emphasis that there are commercially available and applicable, to task illumination. That they were many times applied indiscriminately across the board can be attributed among other things to: 1) the public's lack of concern in the past about energy, 2) the requirement for space use flexibility, and 3) misguided no perhaps the person will not commit himself, and 3) the lack of knowledge about the application of quality to illumination for specific tasks.

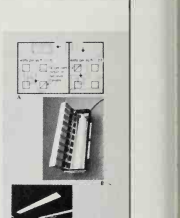
Dr. Blackwell's studies have provided data required to design task lighting projects. Not to be ignored is the fact that more came to be required with better eyes though sometimes it could be worse. Owners in competitive rental situations usually have better complexions, less candles, and more often than not put in more.

From an energy-usage standpoint the IES recommendations properly interpreted by the designer can be a boon to conservation. On the other hand not used, at all, or high energy consumptions even though these recommendations undoubtedly were originally derived from some judgmental decisions in cutting economics acceptance by owners, along with Blackwell's and other research.

With the IES recommended recommended levels of 70, 150 or 300 foot candles for a range of tasks from easy to difficult, but not most difficult, as much as 25 per cent watts per sq.ft. less general lighting systems than could mean about 1 to 1½ watts per sq.ft. in the area involved. One example in this article shows that IES task-levels of general illumination can be achieved with 1.8 watts/sq. ft.

Now, if the task is not fixed, and the luminaires are fixed, then lighting is not ideal in those approaching spaces in office buildings and schools. But would people prefer desk lamps, or the equivalent, if they could have them? Though the illuminance levels are necessarily related to foot-candles of general illumination, it takes more thought, skill and experience to choose illuminances in the most advantageous manner derived more by quickness and task illumination.

In achieving comfort and no-glare satisfaction with room and furniture appearance—i.e. the light one sees which more often than not is the basis upon which people appraise lighting—there is no substitute for experience in regard to what foot-candle levels will be satisfactory. In a room with dark furniture and dark walls and ceiling, more light is the use of illuminance this would be called "the seems dingy. In a room with locally white fur-



A Diagonal contrasts of reading tasks and surroundings with task illuminances kept to low energy use (pages 114 and 115). B Visibility can be enhanced through use of task-levels light. Surroundings can be at lower levels. Luminaires can be arranged in strips (page 116). C Task-oriented illumination can be provided by various applications of luminaires in panels with plug-in distribution systems (page 114). D Task lighting in a room where most light for lower walls (page 121).

Black type (and white) on 50% screen of black

White headline, black text on 50% screen of black

12 EXAMPLES OF EFFECTIVE ARCHITECT-ENGINEER COLLABORATION

What becomes evident as one reviews the projects on the following pages is that there are a lot of people around with a sizable store of technical expertise—not only architects and engineers, but contractors and manufacturers as well. Talking with contributors to this section, the editors also noticed with interest the sheer enjoyment these experts take in attacking a knotty problem, whether it's big or little, and the great satisfaction they find in helping to make a building look more beautiful, or work more efficiently, or go together more simply, or cost less money. These examples range from a potential landmark—a one-of-a-kind commission with one-of-a-kind technical problems—to more common problems uncommonly well solved, such as two thoughtfully detailed curtain walls and a tightly reasoned mechanical system for a Colorado high school with a serious fuel shortage.

LANDMARK IN THE MAKING. PEOPLE WORK HARD TO MAKE THINGS LOOK SIMPLE

Black type on 30% screen of black

Spread-openers for interrelated series: the repetitive technique

This special issue of *House & Home* dealt with various aspects of the crisis in homebuilding (labeled "Homebuilding at the Crossroads" and hence the yellow and black traffic symbol used on the cover and in miniature on all openers).

Since the stories were made up of a great variety of material ranging from plain text to photo essays, the openers needed to be particularly strong in graphic character to ensure recognition as features in the confusing context in which they would be seen. To make matters more difficult, shortage of space required that no more than half a page be devoted to each opener.

Maximum use was made of just four raw materials: a solid black, full-bleed area (strong enough just on its own as a signal); the miniature symbol from the cover; angled headlines; and introductory text blocks which anchor the headlines to the bottom of the panel. There is no question about where stories begin or that they belong to a package.

Making private rehab pay
Every town has its share of rundown buildings in areas that are ideal for multifamily housing. Here is how one such building was rehabbed to produce a gross return of more than 20% on the original investment.
This private rehab job—a warehouse turned into apartments—generates a $20,400 rent roll on a total investment of only $95,000.
The investment by James R. Mowry, who is both owner and architect, was low for two reasons. First of all, the former warehouse (shown below) was reasonably priced because it's in a relatively dormant section of Binghampton, N.Y. Nevertheless, the location has attracted tenants because it's near public transportation and within walking distance of downtown theaters, the library, restaurants and offices.
Secondly, Mowry did surprisingly little remodeling. Instead, he capitalized on the structural soundness of the building, retaining—and exposing—the solid brick walls, the rough-sawn wood beams and the stone foundation.
In fact, except for steam-cleaning the brick and painting window frames, the only exterior work was at the entrance level. New arched doors were framed by brick reclaimed from the building's old meat-smoking kilns.
To dress up the front a curved lattice overhang was installed above the recessed entry, and a wrought iron railing was set around a new light-well that brings daylight to the lower level of the front duplex (plan overleaf).
Inside work consisted of the installation of new electrical, plumbing and heating systems and partitioning to set up the apartments.

Rentals or condominiums?

We're staking our company on the proposition that condominiums will go over big.

So says John W. Kessler, president of Multicon Corp. (he's the one with the cigar). Multicon is a subsidiary of Multicon Properties Inc., based in Columbus. Ohio. Founded in 1962 with Kessler as a general partner, Multicon specialized in the sunbelt apartment market. In 1969 the company expanded to the East and became part of Bethlehem Steel Co. in 1971. This year's Multicon starts are expected to be in the 1,900-1,000 range.

Says Kessler: "Multicon's decision to go condominium was a direct result of the shortage of rental housing and the likelihood that this shortage will continue for the foreseeable future. We're also convinced that condominiums will be the most desirable form of home ownership for the majority of Americans."

Multicon is the only one of the rental builders interviewed by Hewitt & Heinz who was willing to state flatly that condominiums will supersede the rental market. Most builders are hedging their bets, waiting to see how the economy and the condominium market develop.

Of some 1,000 total units Multicon now plans to build in several markets throughout the East Midwest and South in 1972, all but four will be for sale as condominiums (most of them condominium conversions). The big markets, Kessler says, will be the $35,000 range.

Point of ownership, along with tax benefits, is still a major motivating factor in the shelter market. Besides believers like Kessler and the condominium concept creates these advantages at considerably less cost than a comparable rental unit. Multicon's current condominium projects are running about $15 per square foot for new construction—condos and single family houses in your area, plus the rental per square foot for sun belt rental apartments.

Those figures will show you with payment your property taxes, interest, and depreciation, you were to succeed in selling two bedroom condos at $25,500 when around the corner from your building some other builder is offering two-bedroom single family houses for $29,000.

Once you know what your competitors are charging, you'll know what your condominium project or conversion requirements to make your building competitive and new construction in the area.

You can usually forget about the cost of interest rates because there'll usually come to self your units at 6 and 7 years' time when the rates are a somewhat to moderate level.

Now put a selling price on each unit. Here's a rough rule of thumb: Layers offer to help you assess at the price. An apartment or a converted condo ought to sell at 100 to 120 times that apartment's monthly rent. A luxury apartment in a luxury area should command twice a park improvement as shopping can command as much as 150 times monthly rentals.

There's one caveat: Your sales price should be 20% to 30% lower than new for-sale construction—condos for single family houses, that is.

Finally, determine how much cash a unit's owner will have to spend each month to live in his condo home. That's critical because today's prospective buyer considers monthly payout ahead of everything else.

The list should include: a) mortgage payments, b) maintenance and insurance, c) management charges, and d) upkeep of the condominiums. And if you're like most people, you'll want to include in your list of "must" items—access to freeways, shopping centers, etc. But they are relatively small item to move out if, say, the family of three and there are too high that are condominium owners. Therefore a potential condominium owner will check out possible negative factors

Moreover the townhouse boom as condominium should eventually be a natural for those solar housing, an idea whose time just has to come. Here's his behavior:

Despite the potential advantages in high volume and production oriented modules should eventually provide for no solar, even though not all of them do at the present. He says:

"Today they cost more to finance and rent/purchase is another big problem. But I'm sure that we'll be producing modules in the future."

Converting rentals Kessler is even studying the feasibility of converting part of a Chicago project into condominiums. If the prospects look favorable he will probably offer the apartments at one of the buildings to the tenants at a discount. Those tenants who don't want to buy will have the opportunity to move to a similar rental unit in another building on the project, with Multicon paying the mover's tab.

The second option would then be offered as an at a discount to the general public.

Possible dangers. What factors are the future could change the outlook for condominiums? One is the tax shelter problem. If condominium building values are cut off the way Kessler thinks a could rental owners whose tax shelters were way up could pull the plug and sell out. Apartments are more for tax shelter than for current income. This would pose a competitive difficulty for the condominium builder. Kessler acknowledges it.

Another fly in the ointment is the fact that the condominium is a rental hosier. Since there are no more cases purchases rather than rental a boom in the vacation home market could end up as a bust. Kessler doesn't foresee since the down payments for the primary home. And Kessler sees the possible advent of a "Florida" type of condominium boom to both the rental industry and the second-home market, again at the expense of the condominium builder.

But Kessler doesn't see these as major problems. He says, up his case like this:

"The public wants condominiums. Everywhere they've been built they've been a success. The builders should see in them the chance to make big earnings and look for new projects.

Financing. Conversions need a new technique

Ask the bank that holds your owners permanent mortgage to agree to get you—when you ask for it—a bridge mortgage equal to the amount outstanding on the permanent loan. The bridge mortgage is new—not to the financial commitment, was intended to solve the conversion problem. It does two things. It gives you the money to pay off the old mortgage. And it allows the release of the liens on each unit as the unit is sold—some of the lenders on permanent would not do. Typically you'll pay a slightly higher interest rate for this short-term money than for conventional mortgage funds.

At the same rate get the bank or agency to provide the mortgages on the condominium purchase contracts.

If you need money to dress up your apartment's exterior, talk to those costs to the bridge's total and then get an advance on those extra dollars. You'll run out to real risk. For if you don't convert, you probably can refinance the original mortgage for more than the original same. And the proceeds from the building may allow you to save the service.

Once you declare that your building is a condominium—a right only you can exercise—you accept the first mortgage pay off the existing mortgage and the bridge loan when you close on each condominium.

On the other hand if you decide not to convert, you need no financial risk because the bank will not change you the a bridge mortgage you have and the bank will not change you and will require that at least half of the apartments be sold before he'll grant the bridge mortgage thereby allowing you to declare the building a condominium. For from says you may see the interest rate is still higher if you know the bank will not change you to residents of the apartments because most buy a building convenient can take effect.

Marketing. Present tenants are the first target

They have proven over the years to be an apartment owner's best condominium customer. Some will buy because they don't love. Losers says. You can expect about 40% of them to buy. Typically, they'll buy their own apartment—as is—within the first 30 days.

When the tenants don't buy within the first month, says Losers, "we know we have a problem building."

It's crucial, Losers says, that no tenant learns about the impending conversion until the owner is ready to announce it. A tall will stampede tenants into somebody else's apartment hours.

When you're ready, mail a letter to each tenant telling him your intention to convert the sale in that making magazine articles and newspaper clippings that explain positively the benefits of condominium ownership.

One week we included "Learn says in speaking of the conversion of Bedford Towers in Saint Louis, a project developed by Ross to To Buy' by professional salesman Sidney Porter. She's well known and highly regarded by the public."

Once the letter has been sent, you'll need to set up an office at a vacant apartment where the tenants can get their questions answered. Losers's St. Louis office must be a new breed of salesman—one knowledge able in the economics and tax implications of condominium ownership.

Tenants sales will more quickly—partial management has been good over the years. Losers says. Otherwise, however, tenants your salesmen will have to overcome that ill feeling.

The best way to win over an cure tenant. Losers says, is to explain that once the building is a condominium management by whatever method will be give tenants more say over the tenants turned owners will run the building—through their condominium association.

TO NEXT PAGE

Converting to condominium

Conversion specialists

A new kind of company spawned by the rental squeeze

It was an unexpected request that got Lange Properties, a Connecticut builder, into more than its fair share of condominium conversion business.

Late in 1970 the owners of a 144 unit rental apartment house in Stamford tried to unload their building on another investor. When there were no takers, the owners decided to try the conversion route. They hired Lange to handle the sale.

Lange in turn set up Lange Condominium Co., a wholly owned subsidiary, and hired Fairfax Lowe, a former director of marketing and sales for U.S. Steel's Realty Development Div., as its director of marketing. Lowe's job was to sell the rental conversion successfully completed, the new company is moving into others.

The first step: an in-depth market study

You need to determine whether or not the conversion will sell and the more attractive market public wants to buy into locally. It's equally will be the area zone to conditioned lots dwellers that. So to to to sell group that wants home without the suburban drawbacks. Will they perhaps amount empty-nesters who want to escape the city hassle and not much bother to maintain? Or are they suited to the 30 and over, married to senior citizen market?

It's going to be up to your apartment have everything saying which to market. Should it be rented to all urban community or to the suburbs? Should it be for those urban wants studios and one bedroom facilities.

Losers says it's all necessary to an owner to view his apartment house through the well-known and do-it-yourself-kit-developer's eyes. Only then can he have a third party market study. That way you'll get professional, objective answers.

With the market study you'll also have to compute the price per square foot for new construction of condos and single family houses in your area, plus the rental per square foot for sun bet rental apartments.

Those figures will show you with payment your property taxes, interest, and depreciation, you were to succeed in selling two bedroom condos at $25,500 when around the corner from your building some other builder is offering two-bedroom single family houses for $29,000.

Once you know what your competitors are charging, you'll know what your condominium project or conversion requirements to make your building competitive and new construction in the area.

You can usually forget about the cost of interest rates because there'll usually come to self your units at 6 and 7 years' time when the rates are a somewhat to moderate level.

Now put a selling price on each unit. Here's a rough rule of thumb: Layers offer to help you assess at the price. An apartment or a converted condo ought to sell at 100 to 120 times that apartment's monthly rent. A luxury apartment in a luxury area should command twice a park improvement as shopping can command as much as 150 times monthly rentals.

There's one caveat: Your sales price should be 20% to 30% lower than new for-sale construction—condos for single family houses, that is.

Finally, determine how much cash a unit's owner will have to spend each month to live in his condo home. That's critical because today's prospective buyer considers monthly payout ahead of everything else.

The list should include: a) mortgage payments, b) maintenance and insurance, c) management charges, and d) upkeep of the condominiums. And if you're like most people, you'll want to include in your list of "must" items—access to freeways, shopping centers, etc. But they are relatively small item to move out if, say, the family of three and there are too high that are condominium owners. Therefore a potential condominium owner will check out possible negative factors

Moreover the townhouse boom as condominium should eventually be a natural for those solar housing, an idea whose time just has to come. Here's his behavior:

Despite the potential advantages in high volume and production oriented modules should eventually provide for no solar, even though not all of them do at the present. He says:

"Today they cost more to finance and rent/purchase is another big problem. But I'm sure that we'll be producing modules in the future."

Converting rentals Kessler is even studying the feasibility of converting part of a Chicago project into condominiums. If the prospects look favorable he will probably offer the apartments at one of the buildings to the tenants at a discount. Those tenants who don't want to buy will have the opportunity to move to a similar rental unit in another building on the project, with Multicon paying the mover's tab.

The second option would then be offered as an at a discount to the general public.

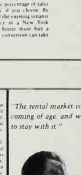
Possible dangers. What factors are the future could change the outlook for condominiums? One is the tax shelter problem. If condominium building values are cut off the way Kessler thinks a could rental owners whose tax shelters were way up could pull the plug and sell out. Apartments are more for tax shelter than for current income. This would pose a competitive difficulty for the condominium builder. Kessler acknowledges it.

Another fly in the ointment is the fact that the condominium is a rental hosier. Since there are no more cases purchases rather than rental a boom in the vacation home market could end up as a bust. Kessler doesn't foresee since the down payments for the primary home. And Kessler sees the possible advent of a "Florida" type of condominium boom to both the rental industry and the second-home market, again at the expense of the condominium builder.

But Kessler doesn't see these as major problems. He says, up his case like this:

"The public wants condominiums. Everywhere they've been built they've been a success. The builders should see in them the chance to make big earnings and look for new projects.

"The rental market is just now coming of age, and we're going to stay with it."



So says Jack T. DeBoer, one of the former of non-believers in condominium housing. He has been convinced of leaving the rental market in which he has grown to one of the country's largest building firms.

DeBoer says the best way of staying healthy in the uncertain housing market is to keep your options open. He avoids talking the slop-out of rental units.

DeBoer thinks that rental new rental builders have been able to show black ink without being too careful about building and management costs. That situation, does not exist any longer, he says. Costs are up and rents are down. Only the most efficient builders will survive.

DeBoer's own experience has been that there are costs to be cut and quality to be improved in the management of rental condominium properties. It's a matter of light bulbs.

Looking ahead. A major reason for DeBoer's optimism on multi-the rental markets is his connection that condominiums will soon begin to price them selves out of the market.

DeBoer's own interest in condominium building activity what has happened to the single family market over the last twenty years. he says

What happened there was a case of too good a thing, he says she industry.

The period from 1946 to 1950 saw an interesting evolution. First you had a two-bedroom house on a slab, then three bedrooms and a full basement and so on up the line. By the time the single family housing industry got more, even though today you can still build a two-bedroom on a slab at nearly the same relative cost as you could in 1946.

The industry could sniff out the demand for more bedrooms and it's going to do the same thing with the rental market.

On the national builder's and family's building outlook in 2001, DeBoer believes that there soon ago, because we've learned that we can't afford to make long takes any longer.

Today's high quality DeBoer says means that maintenance costs have been substantially reduced.

And we keep the lid on rents higher. Do equipment and capital inspections of all rate projects that the responsibilities of only of the local managements on the corporate level. Every rental Department which a based here in Wichita but on within two and a half driving hours of all our developments."

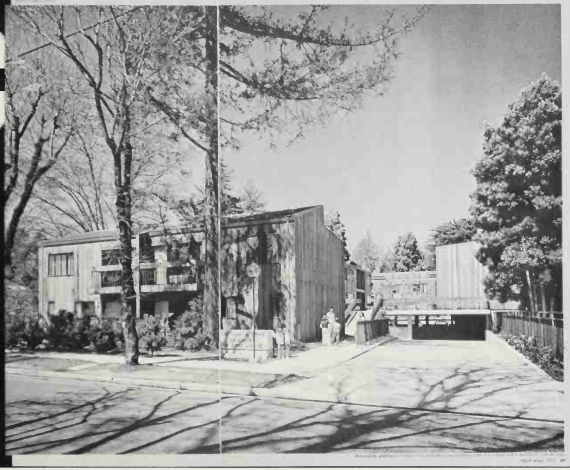
DeBoer's attack on high costs is two-pronged full-time inspection of maintenance and enhance men's and a performance sub-job to keep a log on the actual costs of its performance hardware—a sort of Consumers Union for landlords.

This can make a has differ

TO NEXT PAGE

Making the small site pay

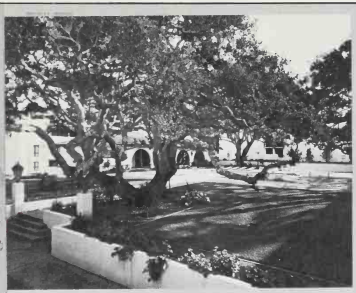
Every town has its share of small land parcels available on prime locations where multistorey housing is possible and actually in use. How two such parcels, each about half an acre, were put to optimum use



4/color

Making the problem site pay

A host of potential apartment sites get bypassed because of some serious problem of land utilization. Here are three examples of how such problems were solved—and even turned into assets



The five-hectare site at Montreuil, Paris, is a common problem—how to work around big trees in irregular terrain—was turned into a design and marketing asset. Result: The 140-unit project has been fully rented since five weeks after its opening in April 1970. Rents, slightly higher than those of comparable apartments in the area, comprising apartments ranging from $208 to $250 for one- and two-bedroom units.

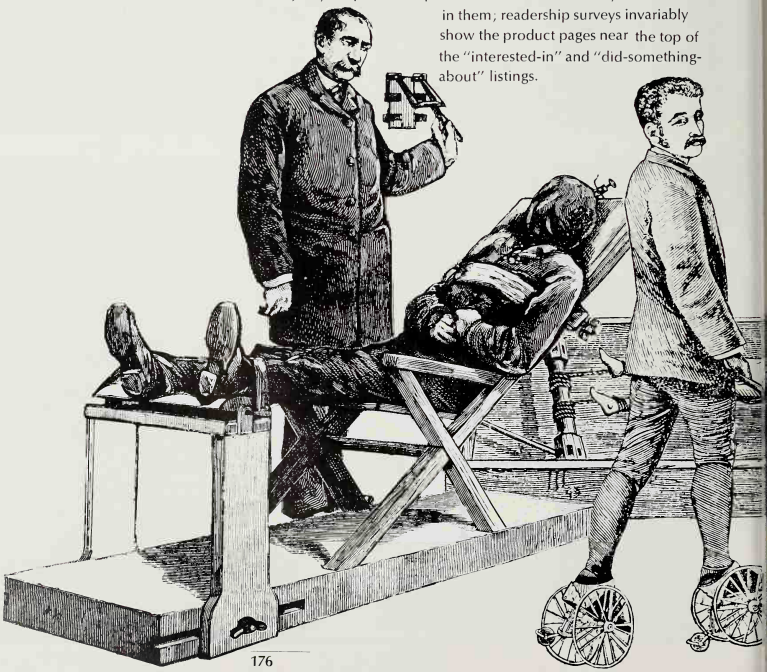
Having the trees make and preserve the site rather than spend more than the usual cash space. So, three-story buildings were necessary to reach the desired density of 28 units an acre. Aside from the trees, the project's most distinctive feature is the way it steps down the hillside.

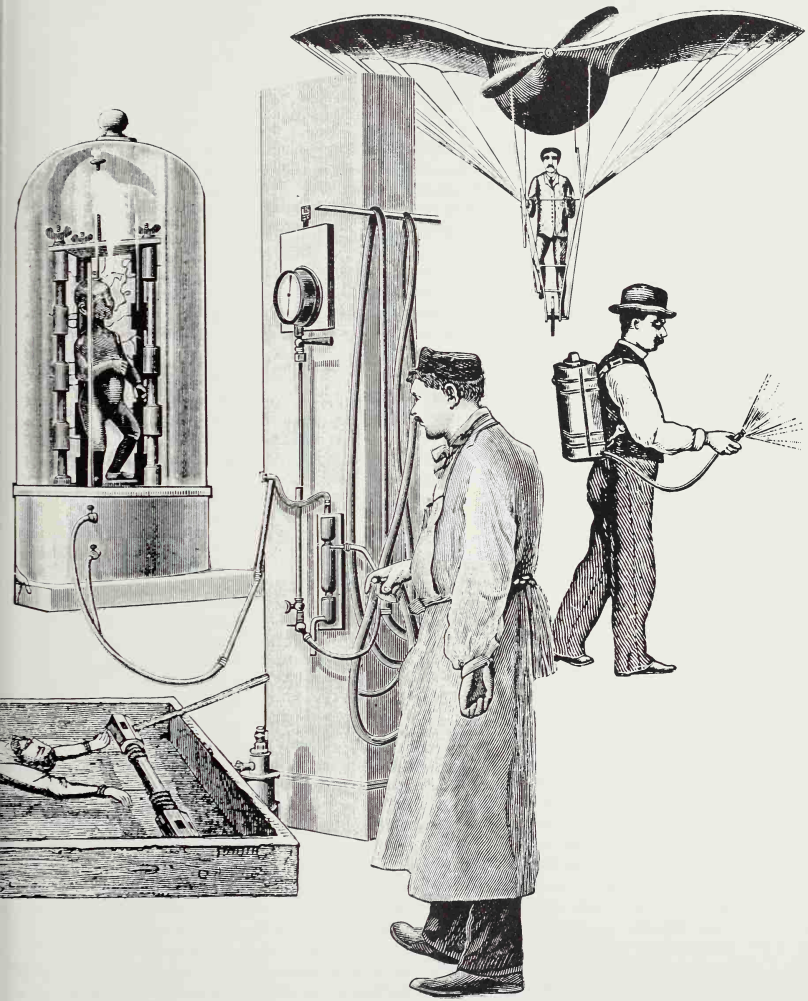
The project built by James Sellerio for Tom Trollope was designed by Rantz H. Cowan & Associates, whose solution of a very different site problem is shown on vertical

PRODUCTS

This seems to be the least glamorous part of a publication. The manufacturer-supplied picture (normally of doubtful quality) and press release copy (normally of prejudiced content) seem far away from journalism. So they are. And usually the chore of assembling the items for inclusion in the publication is delegated to the junior members of the staff: the assistant editor and the assistant art director (who just got their names on the masthead so can't in conscience object!). But, let's face it, rewriting press releases and scaling product pictures is no great fun.

So why have new products reports at all? Simply because the vast majority of specialized publication readers are vitally interested in them; readership surveys invariably show the product pages near the top of the "interested-in" and "did-something-about" listings.





The widespread use of "bingo cards" (Reader Service cards on which the reader circles the number of the item he is interested in and mails back for more information) bound into the magazines also proves the drawing power of new product information.

The usual image that comes to mind when thinking of "new products" in a typical magazine is column after column of filler material separated by small space ads in the back of the book. This is, of course, a justified image, however sad and unimaginative the treatment may be. But this mechanical, regurgitated presentation is by no means the only — or the best — way of showcasing new products. It seems to be the easiest, simplest, most efficient way to kill several birds with one stone: to fill up those spaces, to give the ads editorial support, to keep the junior staffers busy, to publish useful information, and to keep advertisers happy (though perish the thought that editorial integrity and space be affected by anything so crass as plugging materials under commercial influence!).

The usual three-to-a-page presentation, with picture and small headline for each, plus those usually-too-black lines that say something like "for further information check No. 000 on Reader Service Card" needs no illustration.

Of greater interest, however, are some of the other presentation patterns illustrated on the pages that follow. Naturally, as in everything editorial, the choice of technique depends on the editorial and publishing goals. If the new products reports are just fillers, then a throw-away technique is adequate. But if higher ranking is desired, then varying degrees of importance can be given to the reports, as tactically appropriate.

New products as "story"

This is usually a technologically interesting item, and by delving into the item's background, purpose, ability to improve current techniques or practices, the editors can bring out its significance more fully than in a simple product description. Naturally, such a story-in-depth requires more space, more text, more pictures, and larger headline treatment. Also its interest value can be counted upon to attract the reader's attention. This is a very useful stratagem with which to begin a news section; not only is interest generated, but the seriousness of the report lends stature to the rest of the product reports and makes it clear that they are more than mere press release rewrites. An example is found on page 186 on which *House & Home* combines the major article with an index of products to be found on other pages (one of which is also shown).

New products as "news"

A slightly different angle from the product-as-a-story is used here, resulting in a slightly different presentation; the product-as-story can (and should) be laid out as a regular feature. (The *House & Home* example is, perhaps, too restrained in format to be an ideal example of this.) The product-as-news is laid out according to the news section format, so that it appears as a normal news story that happens to be about a manufactured product rather than about a political action, let's say, or somebody getting an award. As such, the piece has a headline which describes the news significance of the item, and the picture will probably not be a picture of the product itself but of the people who made it or something else that illustrates its *news* worthiness.

The example from *Chemical Engineering* shown on page 188 describes a process rather than a manufactured product, but products can be handled the same way. Page 189 illustrates a typical page which might follow such an opener on which two degrees of importance are shown: short product reports, illustrated and unillustrated, as well as a "boxed item" which signals the product's attention-worthy importance. All the layout formats, however, are exactly the same as those used for nonproduct "news."

New products as "show windows"

This is a group of related items presented as a major report — the emphasis is on the *group* rather than on any individual item. Thus the umbrella headline (normally a simple label is most effective) is the focal point of the presentation, and the design problem is tying together the disparate elements into arrangements that make sense graphically. Such design chores can become quite arduous and ultimately thankless, since the result will probably not be terribly exciting, no matter how much effort and talent are brought to bear. Usually there is just too much material to shoehorn in and everything is just too small to be graphically stimulating. A camouflaging format, therefore, is needed to provide spaces into which the items can be dropped, yet which will become — in itself — the apparent "design" of the page. An example from *Industrial World* is shown on pages 190 through 193. The ruled-box "net" gives the pages unity; and since there are a number of pre-drawn interchangeable nets available, the page makeup, issue to issue, becomes child's play. (Compare this to the Contents Page example, on pages 52 and 53 for treatment based on the same principle.)

What makes the *Industrial World* example significant in the context of this analysis, though, is that a normal, ordinary, mixed-bag new products section is also run in the same issue every month. Comparing the two makes the point about editorial purpose quite clear. (See page 193).

New products as "catalog"

Some publications devote major space to new products in every issue. Others do so only on occasion (such as once a year in a special issue). But whatever the frequency, certain catalog techniques are followed which should be pointed out. First of all, however, it is necessary to mention that the catalog business is burgeoning. Selling by mail from illustrated catalogs fills a proud and glorious page in this country's social history, though the graphic design of catalogs has only recently received the attention it deserves. An art it certainly is. Glamorous-looking, fashionable catalogs from expensive department stores receive tremendous design attention, and the illustrations are made by highly trained specialists. The investment involved is met in part by fees charged to the manufacturers of the various products shown in the catalog, though the catalog is made to *appear* to represent a single client, i.e., the department store. What holds these catalogs together and gives them their unity as a visual entity (in spite of the hundreds of individual items shown) is that they are a mosaic assembled according to an overall design plan. This plan may be based on a coordinated color scheme, or on groupings of pictures, or on groupings of items within larger pictures, or on overlappings, or on framings or on silhouettings, or on any number of other graphic gimmicks that will make an attractive package from the mass of unrelated items. The attractiveness makes the recipient react positively to it. It is meant to cajole him into liking it, spending time studying it, making it easy for him to absorb it, and persuading him to use it.

Alas, new product departments in magazines — however much they may wish to emulate these catalogs — cannot achieve such selling glamour; except in a few very special circumstances, they have neither the requisite funds, materials, nor time to produce such a package. They must get whatever glamour is possible within the practical restrictions in which they work, and make up for their more modest format by other means: primarily, service to the reader, by which they achieve the same goal as the glossy-format catalogs by persuading him to use the new products page(s).

Once the job of attraction has been accomplished the goal is to require of the reader minimum effort at maximum speed. Efficiency and ease of legibility are the touchstones. Items should be grouped logically in whatever groupings make most sense; the descriptions must, obviously, carry the requisite information; but — the most important criterion of all — the relationship between picture and description must be immediately apparent. Having to hunt around the page for the caption that fits the picture is time-consuming, irritating, and, as such, counter-productive.

Some sort of numerical labeling has been found to be the simplest, so long as the numbers can be found. On pages 194-197 are examples from *House & Home* and *Architectural Record*. The first one shows grouped pictures with large numbers dropped out of them referring to the descriptions at the foot of the page. The second is similar except that the text runs vertically and the numerals are in the interstices between the pictures. The *Architectural Record* presentation shows a typical page from a special issue in which a simple-to-apply system was invented to fit the picture requirements as well as give some flexibility in the length of descriptions. The spaces for pictures are standardized but the pictures that go in them are variable (as long as they are in a lower-left corner in each). The spaces for text are standardized also, but the text lengths are variable (as long as they are flush left and the first line in each column starts at the same position on the page). The dummy sheet indicates the system clearly. Without a system such as this, it would be likely that 768 separate items (each with its picture, number and blurb) on 67 pages could be a direct road to insanity for all.

Another possible catalog treatment is shown in the example on pages 198 and 199, typical of pages in the Book Review section of *Library Journal*. As far as graphics is concerned, this is simply a variation on the catalog theme; each of the many items consists of a group of predetermined elements, varying in length but of a predictable sort; all the items are grouped by subject, and they flow on page after page after page (which is yet another characteristic of catalogs).

Given the varying degrees of emphasis and their concomitant techniques of presentation, it is possible for a publication to generate great interest in its new products reports; there is no reason why all of these techniques could not be used on occasion, or why any one technique must be the standard one for a given publication forever. It is not the products that are dull; it is usually the unimaginative presentation that is the bore.

Plain new products columns dressed up

A perfectly standard presentation technique of headline, picture, text, address, and "circle" line had to be improved, in order to give the material greater visibility, the pages more oomph, the section coherence (especially since very

IN PRODUCT DESIGN-FUNCTION-ASSORTMENT

For complete table of contents, see page 3. For product and company index, see page 4. This material compiled from manufacturers' information. Listing does not imply Dental Economics endorsement. For additional information circle the appropriate number on the convenient Reader Service Card. Page 36. Any quoted prices are subject to change without notice.

NO. HEAT GUNS—Dental laboratory process, flameless heat to 1000° F is delivered from a safe, cannot that allows desired up setting time of acrylic plastic resins, drying of x-ray films ers and decreases the es to soften thermo- he newly developed mmer lits entire fins and can be attached ferent positions The ectional air diffuser

also pre-heats the gasport tube which provides concentration of high temperatures on a specific small area. Master Appliance Corp., 1745 Flett Ave., Racine, WI 53403.

For information circle 126 on postcard.

VERSADENT—A new fully portable dental unit with basic concept eliminating frills and cabinetry construction. Designed for sit-down, two or four-hand dentistry, left or right-handed operation. Working mechanism employs standard industrial components so that replacement parts may readily be obtained. Unit lends itself especially to

use in satellite offices, hospitals, nursing homes, dental schools, etc. Comprehensive general practice, orthodontic, dental hygiene, and assistant units are offered, each with several options. Versadent, P O Box 4225, Davenport, IA.

For information circle 131 on postcard.

UNI-CHAIR—A new series of chair-mounted tables and attachments providing total convenience for either two-handed or four-handed dentistry. Designed for four-hand and assistant to provide fast, efficient, trouble-free dentistry in the smallest of operatories. The "Hex" model is ideal for dentist who already has existing suction equipment and who wants to convert to over-the-lap instrumentation The Hygienist model provides all equipment needed for hygiene dentistry, with added benefit of compact design and ease of installation The Uni-Chair "Hero" conveniently provides the assistant with all the tools she needs to help dentist work faster and easier. Den-Tal-Ez/A Dec., 1203 S E Diehl Ave., Des Moines, IA 50315.

For information circle 132 on postcard.

TMJ RECORDING ASSEMBLY—Is for accurate centric bites and split cast checking. Consists of Upper and Lower Slotted Plates, adjustable 120° Center Bearing Screw, Spacer Parallel-ing Ring and 6 Plastic Cones for injecting stone. The Slots function as split cast mounting in checking accuracy of shim cre-

Continued on page 33

What's New

DISCLOSING TABLETS IN HOLE

Preventodontic Disclosing tablets are now available 1000 tablets in a single package. The tablets are individually sealed in cellophane sheets. Each sheet

which contains ten tablets, can be easily dispensed to patients. Myerol, Inc.

For information circle 124 on postcard

ELECTRIC EYE SINK

The Aquatron electric eye sink affords sanitary working conditions with complete efficiency and safety. Water flows automatically when hands interrupt the self-contained electric eye beam, stops when hands are pulled from the flow. The sink features preset water temperature adjustable pressure regulation, absence of exposed knobs to contaminate hands and an easy-to-install design. Basins are available in various chime, porcelainized cast iron or stainless steel in a variety of standard or oval configurations. Price, $189.00 Quotes

For information circle 125 on postcard

IMPRESSION COMPOUND

Cardex Super impression compound is a silicone rubber base material developed to take impressions of inlay cavities — crowns and stumps to be fitted with dowels It is used in connection with the copper ring method. The compound consistency is similar to that of thermoplastic impression compounds so that the operator can continue his accustomed work method with copper rings. Cold curing (five minutes) is said to be its major advantage Peerless Dental Corp.

For information circle 126 on postcard

DRYING AGENT

Prep-Dry, is a liquid that when dabbed on enamel or dentin, completely removes only surface film and moisture, thus improving the performance of adhesives requiring a dry field It is noninitiating to soft tissue and is available in

a kit containing two 4-ounce bottles Lee Pharmaceuticals

For information circle 127 on postcard

CUSTOMIZED DENTAL KITS

A single dental health kit cannot meet the needs of everyone Dentists can now customize dental health control kits for their patients home use Included in the kit is — a toothbrush avail-

able in a variety of shapes and styles, a mouth mirror, tinted dental floss, disclosing tablets and a brochure John O. Butler, Co.

For information circle 128 on postcard

MOULD GUIDE

A mould guide for Myerson's Porcelain Special Anterior teeth is now available The leatherette mould guide includes samples of each mould with dimensional data, articulations and other necessary information. Myerson Tooth Corp

For information circle 129 on postcard

DISPOSABLE CARTRIDGE

The new ball bearing air turbine cartridge used in the Whispering Tornado now only requires oiling once a week. This new type disposable cartridge will operate for two hundred hours or 70,000 cutting operations at 200 grams pressure. Price, cartridge alone, $36.00. Lincoln Dental Supply, Co.

For information circle 130 on postcard

CHIPS RETRACTOR

Made of non-conductive plastic, Ora-Shields slip around the corner of the mouth to retract and protect the cheek For greater retraction a rubber band can be attached to the catch and looped over the ear Ora-Shields are disposable light in weight, and remain in place without being held by the patient or assistant They also protect the lips.

Continued

The purpose of this department is to provide convenient, up-to-date new product information. It is compiled from manufacturers information. Listing does not imply Dental Economics endorsement. For additional information write to the manufacturer. For additional information circle the appropriate number on the convenient Reader Service Card. Any quoted prices are subject to change without notice.

peculiar spaces among the small ads had to be filled). Problem: no changes allowed in the material itself.

The solution: to enclose each column in vertical rules with wide spaces between them, so that each column becomes a free-standing vertical unit and to separate the headline from the text and overscore it with a heavy rule, underscore it with a light rule and thus give it "color." The spacing was, of course, coordinated with the line-by-line typesetting system so that makeup would be simple. The resulting pattern of dark and light strokes became the "design" of the pages, highly visible and individual.

Here is a much simpler technique than the one from *Dental Economics*, opposite. Again we have a three-column makeup (shown here is the opener of the section which devotes the outside column to a vertically run logo); the individual text pieces are somewhat longer than is usual, so that there are fewer elements that can be "dressed up" per page. The headlines are enclosed between two rules in the same way as *Dental Economics*, opposite, but here the lower line becomes the top line of a standardized box into which the illustrations are dropped. Because the great majority of the illustrations are pictures of medicines (i.e., boxes or bottles of some sort) it makes sense to decree that all illustrations be silhouetted, since it is easy to silhouette simple shapes such as boxes or bottles. So in this solution, the handling of the illustrations becomes the visual signal characteristic of the section.

novos produtos

NICOTILESS Pastilhas

Indicações — Medicação auxiliar na erradicação do tabagismo

Fórmula — Em cada pastilha sulfato de lobelina, 0,5 mg.

Modo de usar — Deixar dissolver uma pastilha na boca, todas as vezes que sentir necessidade imperiosa de fumar, até o máximo de 10 pastilhas por dia.

Apresentação — Caixa com 20 pastilhas.

Produzido por Boehringer do Brasil S.A., Av. Brasil, 5843, Rio de Janeiro, RJ.

BIPENCIL

Indicações — Infecções determinadas por germens sensíveis à ampicilina.

Fórmula — Em cada frasco-ampola ampicilina benzatina, 250 e 500 mg; ampicilina sódica, 50 e 100 mg, citrato de sódio, 10 e 10 mg, carboximetilcelulose sódica, 40 mg, polivinilpirrolidon (PVP), 20 mg; lidocaína, 20 mg.

Modo de usar — Via parenteral. um frasco de 12 em 12 horas ou de 24 em 24 horas.

Contra-indicações — Sensibilidade à penicilina, infecções por estafilococos penicilino-resistentes, primeiro trimestre da gravidez.

Precauções — Podem ser verificadas superinfecções por germens resistentes ao antibiótico, quando o produto for usado por longo tempo.

Apresentação — Embalagem com 1 frasco-ampola e 1 ampola diluente.

Produzido por Colúmbia do Brasil S.A., Indústria Farmacêutica, Rua Magalhães Castro, 170, Rio de Janeiro, RJ.

AMOXIL Cápsulas e Xarope

Indicações — Infecções das vias aéreas superiores e inferiores, infecções urinárias e entero-infecções, inclusive febre tifóide.

Fórmula — Em cada cápsula e em cada 5 cm³ de xarope: alfa-amino-p-hidroxibenzilpenicilina, 250, 500, 125 e 250 mg.

Modo de usar — Via oral. 250 a 500 mg, de 8 em 8 horas, para adultos e 125 e 250 mg, 3 vezes ao dia, para crianças.

Precauções — Suspender a medicação na eventualidade de reações alérgicas, principalmente em pacientes com antecedentes de asma, urticária etc.

Contra-indicação — Pacientes hipersensíveis à penicilina

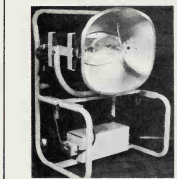
Apresentação — Caixas com 9 cápsulas de 250 mg e com 6 cápsulas de 500 mg. Frascos com pó para preparar 45 cm³ de xarope.

Produzido por Laboratórios Beecham Ltda., Divisão Villela, Rua das Oficinas, 188, Rio de Janeiro, RJ.

The example on this page is based on a very simple trick: using a four-column width in a three-column space. The text is set to fit in narrow, four-columns-to-the-page measure, but put in vertical one-thirds or two-thirds spaces. The white area thus left over appears "wasted." But perhaps one ought to consider the attention-getting value of such "wasted" space: it may be a good investment, especially when there are many such mixed pages that have

Product News

fits all standard bolts. Sets of V-cut combination box and open-end wrenches incorporate ratchet design without moving parts. All Quali-Kraft tools are drop-forged from chrome vanadium steel.—Mitsubishi International
CIRCLE 206 ON INQUIRY CARD



Portable floodlight has added brightness
Spring-mounted, wheeled PORT-A-LITE accommodates GE 1,000-watt multi-vapor lamp having about four times the intensity of incandescent or quartz units; twice that of mercury-vapor. The system has a waterproof off-on switch, 50 ft of grounded electrical cord adaptable to any 110-v, 10-amp outlet, and 25 ft of secondary cable.—Alimand Bros.
CIRCLE 207 ON INQUIRY CARD
continued on next page

HKP The COMPLETE Cutter Line

Lightweight fiberglass handles make cutting easier...

overhead or at a len

SHEAR TYPE CABLE CUTTER
Light 4½ lbs. Capacity 1⅜" soft cable. Cutterhead looks like this...

GENERAL PURPOSE METAL CUTTERS
3 sizes 24½" to 36½" all lightweight, all rugged... for soft, medium and hard metals.

HEAVY DU
Extended r
line under
Over 100 di
Ask your H

THE COMPL
CU
LIN

HKP

Product News

Dolly aids dual truck wheel servicing
Wheel and tire assemblies up to 1,500 lb are easily handled with the Mobile Dual Wheel Dolly. The units include a 5-in.-lift hydraulic jack, three swivel casters, and an adjusting screw that permits a 2-deg tilt. A built-in, 6-ft safety chain secures wheel assemblies during movement.—Owatonna Tool Co.
CIRCLE 210 ON INQUIRY CARD

Truck service bodies have adjustable spaces
Storage compartments of Markel-Morrison service bodies have adjustable trays with divider tabs permitting any length of shelf. Dividers also let units break down into small parts bins and are adjustable in tray slots on 3-in. centers. The system is available in all firm's current models, and accomodates 15% more equipment.—Markel Electric Products Co.
CIRCLE 210 ON INQUIRY CARD

Wear patch is easy to install
A new hardfacing wear patch is made from heat treated, high alloy steel, and has ½-in.-dia center hole for plug or tack welding. Patches cover all surfaces without heat or distortion and can be oxyacetylene-torch-cut to match irregularities without weakening. Patches are 3×4×3/16 in.—Kenco Engineering Inc.
CIRCLE 208 ON INQUIRY CARD

Portable band saws are safer, more durable
Single-speed Model 3120 and two-speed Model 3122 electric band saws have insulated housings and gripping areas, and a two-finger-sized trigger switch. Sealed lube system cuts maintenance to only every 4 to 6 mo. Surface speed is 250 fpm (200 fpm also for 2-speed unit). The 16-lb, 19-in.-long saws cut 3⅝×4¼-in. rectangular stock and 2⅝-in.-dia round stock.—Black & Decker.
CIRCLE 213 ON INQUIRY CARD

Magnetic yoke kit aids crack detection
Lightweight (7¼ lb) Y-6 magnetic particle yoke kit tests for surface cracks on irregular or hard-to-reach areas, covering up to 24 sq in. at a time. Articulated legs span 1 to 10 in. Unit checks heat, stress, and fatigue cracks. The 8¼×7¼-in yoke works from regular electrical source or 12-v battery.—Magnaflux
CIRCLE 202 ON INQUIRY CARD

Hand wrenches adjust rapidly
The Model FD 800 8-in. adjustable open-end wrench changes opening quickly with thumb control, works at settings up to 15/16 in., and

20% Saving in Labor

with • • • • Steel-Ply Forms

Project: $3 million Isla Del Mar condominium, Florida
Contractor: Jorge Vila
Equipment: Steel-Ply Forms
Benefits: Because Symons Steel-Ply Forms are lighter, easier to handle and faster to erect, contractor Jorge Vila reduced his labor costs by 20% on the construction of columns and shear walls. This savings was in direct comparison to another patented forming system Vila used on a previous project.

Call for complete information on how Symons Forms can help you.

Labor Savings Equipment & Systems For Concrete Construction

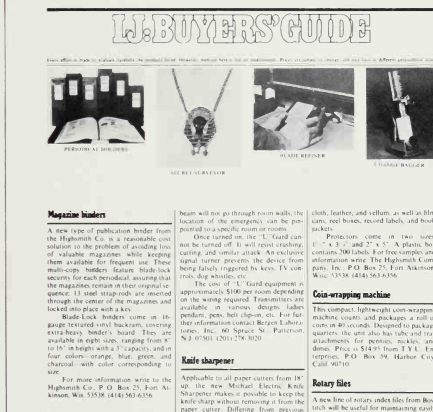
SYMONS CORPORATION
108 EAST TOUHY AVE.
DES PLAINES, ILL. 60018

133

4-column makeup ("A") used in 3-column space ("B")

to be filled and ought to be made recognizable. The upper example shows a vertical-third space, with the pictures sized to the full one-third width; the lower one shows the effect of keeping the pictures within the confines of the narrow one-fourth column; perhaps having the pictures poke out into the white space would have been more interesting. But that wedge of clean, white space certainly splits the editorial matter from the ad!

Here the space is arranged differently: the emphasis is on the horizontal flow from page to page (see page 96 for the context from which this page is taken). The columns' verticality has to be chopped down. By pulling the pictures away from the text and suspending them as random-size units from the logo, the space for the text becomes a square. This square is emphasized by the tight way in which the type is placed in it. To add literary interest — and to tease the reader a little — the picture captions are worded differently from the way in which the headlines are written.


W.BUYERS' GUIDE
PERSONAL ALERT DEVICE
SEE-RET-SERVATOR
BLADE REFINER
CHANGE BADGER
Magazine binders
A new type of publication binder from the Highsmith Co. is a reasonable cost solution to the problem of avoiding loss of valuable magazines while keeping them available for frequent use. These multi-copy holders feature blade-lock securits for each periodical, assuring that the magazines remain in their original sequence. 13 steel strap-rods are inserted through the center of the magazines and locked into place with a key.
Blade-Lock binders come in 16-gauge textured vinyl buckram, covering extra-heavy binder's board. They are available in eight sizes, ranging from 8" to 16" in height with a 3" capacity, and in four colors—orange, blue, green, and charcoal—with color corresponding to size.
For more information write to the Highsmith Co., P.O. Box 25, Fort Atkinson, Wis. 53538. (414) 563-6356.
Personal security device
Library staff working in security hazardous areas might welcome the "L" Guard, a thumbsize personal security device that can be worn or hidden in clothing or pocket. The device is a miniature battery-operated electronic generator that emits a constant ultrasonic signal which continues for over one hour when triggered and is picked up by receivers hidden in a room. These receivers can be specially wired or utilize existing wiring in the building to bring the signal back to a control panel in a security office.
Every room can be provided with a receiver which picks up signals as the person wearing the transmitter moves from room to room. Thus a path is indicated on the control panel for rescue at the point of emergency. Since the ultrasonic beam will not go through room walls, the location of the emergency can be pinpointed to a specific room or rooms.
Once turned on, the "L" Guard cannot be turned off. It will resist crushing, cutting, and similar attack. An exclusive signal turner prevents the device from being falsely triggered by keys, TV controls, dog whistles, etc.
The cost of "L" Guard equipment is approximately $100 per room depending on the wiring required. Transmitters are available in various designs: lapel pendant, pens, belt clip-on, etc. For further information contact Bergen Laboratories, Inc., 60 Spruce St., Paterson, N.J. 07501. (201) 278-3020.
Knife sharpener
Applicable to all paper cutters from 18" up, the new Michael Electric Knife Sharpener makes it possible to keep the knife sharp without removing it from the paper cutter. Differing from pre-use sharpeners, it has a one-arm grinding wheel swing to meet all knife levels down to the cutting stock. The bevel angle setting is never altered from the initial setting, giving a constant bevel to any level of the knife. Another important feature is an adjustable metal stop-pin which eliminates burrs and double grinding in spots.
Available from Michael Business Machines Corp., 145 West 45th St., New York, N.Y. 10036. (212) 582-2900.
Label protectors
A new adhesive, translucent label protector of tough plastic is now available to keep book labels or direct lettered call numbers permanently in place. Highsmith See-Thru Label Protectors will adhere to textured material such as book cloth, leather, and vellum, as well as film cans, reel boxes, record labels, and book jackets.
Protectors come in two sizes: 1½" x 3½" and 2" x 5". A plastic box contains 500 labels. For free samples and information write The Highsmith Company, Inc., P.O. Box 25, Fort Atkinson, Wisc. 53538. (414) 563-6356.
Coin-wrapping machine
This compact, lightweight coin-wrapping machine counts and packages a roll of coins in 40 seconds. Designed to package quarters, the unit also has tube and tray attachments for pennies, nickels, and dimes. Price is $149.95 from TYL Enterprises, P.O. Box 39, Harbor City, Calif. 90710.
Rotary files
A new line of rotary index files from Boorum & Pease will be useful for maintaining frequently changed listings, e.g., periodical files. Molded of G.E. Lexan and Cycolac plastic, the same high impact materials used in space and football helmets, these files will stand up to heavy abuse and will not crack, dent, chip, or peel. The files also feature a no-slip clutch which makes the job of turning the cards easier.
The four models of the Bluemark line come, with cards and alphabetical guides included, in grey or beige with (or without) a bronze color cover, at these suggested prices: RF-245, 500 cards 2½" x 4": no cover, $11.95; RFC-245, 500 cards 2½" x 4", $16.95; RFC-245 Twin 1000 cards 2¼" x 4", $27.95; RFC-355, 500 cards 3" x 5", $22.95. Available in office supply, department stores, etc. From Boorum & Pease Div. of Ludlow, Inc., Briggs Dr., E. Greenwich, R.I. 02818. (401) 884-2500.
LJ JAN 1974 1787

Section opener features a product as a "story"

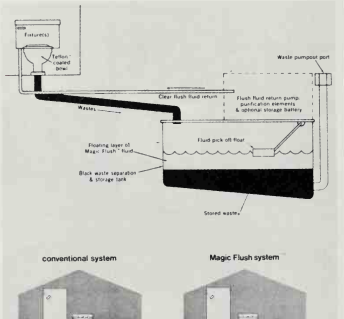
The opener is signaled not just by the large logo with its bold vertical rule, but also by the index beneath it. The index may or may not be used as such by the reader, but it is extremely useful as an indicator of the *beginning* of something as well as a suggestion of the *amount* of that something.

The product report on the opener is oriented less to the product as a product than it is to the effect that the product might have on the industry as a whole — which, of course, affects more readers than just those who happen to be in the market for the specific item. To open a products section with such a wide-ranging report adds stature and seriousness to the entire section.

The subsequent pages, each organized about a subject, are carefully assembled to give them an information-packed (i.e., full-of-value) look and to glean the greatest possible variety of arrangements from the four-column format. The page arrangements are anything but random, taking into account, as they do, the scale of the material shown in the pictures, the balance of the page as a whole, the necessity to square off elements against each other as well as to tell the stories clearly.

PRODUCTS

78 Interiors
79 Interiors
80 Recreation
81 Recreation
82 Security
87 Security
88 Electrical
89 Electrical
90 Interior environment
92 Interior environment
93 Interior environment



Sewerless toilets: One answer to local restrictions

Builders stymied by moratoriums on sewers and septic tanks can benefit from the Magic Flush™ sanitation system.

With the system, black waste—highly contaminated toilet waste—is stored in a sealed underground tank for future disposal. The lightly polluted washing and bathing water—grey water—is disposed of separately. *(See diagrams above comparing conventional system and Magic Flush system.)*

No water or chemicals are used with Magic Flush. A clear odorless mineral-derived fluid flushes the bowl and carries the waste to the underground tank. There the waste sinks to the bottom and is stored beneath a floating layer of the liquid until pump-out by a disposal truck. *(See top diagram above.)*

The stored waste, containing all the bacteria, viruses and polluting nitrates produced by people, is preserved in its original state by the cover of nonreactive liquid. No breakdown occurs, thus on-site black waste pollution is eliminated. The fluid is put through a simple purification process and reused over and over again.

Available with either 400 or 1000 gal tanks, Magic Flush can accommodate from one to four toilets. Tanks fill over an extended period of time. The 400 gal unit, for example, can be utilized for up to 6,000 flushes, which means it could serve a family of four for a year with only one pump-out.

A fail-safe shut-off device stops the system from operating if the tank is full and has not been emptied or if a blockage occurs. Device also prevents sewage back up, and the system provides ample warning when it needs a pump-out.

Magic Flush toilets look much the same as conventional water units except that the insides of bowls are Teflon®-coated.

System can be installed using a variety of power sources. Service and pump-outs can be provided by Monogram, the manufacturer, or by local companies and governmental departments trained by Monogram technicians. Monogram, Venice, Calif. CIRCLE 200 ON READER SERVICE CARD

Joe Davis

Billiards table with solid slate bed, "Spirit of '76," features a heirloom look. Cloth and vinyl options are red; legs and rails are black. Table with ball return is 4 x 8'. Ebonite, Miami Lakes, Fla.
CIRCLE 222 ON READER SERVICE CARD

Mechanical ice hockey table, "Power Line Play," *(below)* is for institutional use. Game has unbreakable men and rigid aluminum control rods. North American Recreation, Bridgeport, Conn.
CIRCLE 223 ON READER SERVICE CARD

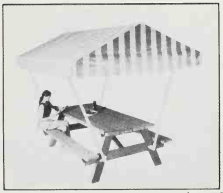
Natural stone surfacing material, ASTRO-STONE®, *(above)* is composed of epoxy-coated aggregate or marble chips. Surface is slip proof, resistant to temperature extremes and needs little maintenance. Astro-Stone, Lake Success, N.Y.
CIRCLE 225 ON READER SERVICE CARD

"Whirlwind" slide *(left)* offers safety and maintenance saving features. Top platform is enclosed, ladder has safety treads and stainless steel slide bed is rust-free. Miracle Recreation, Grinnell, Iowa
CIRCLE 226 ON READER SERVICE CARD

Portable basketball backstop *(right)* can be moved by tipping it backward onto two rubber tire wheels. The 370-lb backstop is stable when in position and its base is equipped with non-marring floor protectors. Sportsplay, St. Louis
CIRCLE 227 ON READER SERVICE CARD

Canopy table *(below)* is constructed of 2" thick redwood. Large enough to seat 12 people, table is smoothly sanded and treated with preservatives. Vinyl-coated canvas canopy is offered in ten colors. Omar Products, Lake Zurich, Ill.
CIRCLE 228 ON READER SERVICE CARD

Versatile playground unit, "Playtank," includes slides, fireman's pole and ladder ring. Translucent fiber glass components make inside activities visible from the outside. Fire retardant resins are used throughout the equipment. Kilgore Corp., Reedsville, Pa.
CIRCLE 224 ON READER SERVICE CARD



more products on page 92

New products reports handled as "news"

The first three or four product reports that open the section in *Chemical Engineering* are approximately three pages long and are handled in precisely the same way as straight news stories are: the typographic treatment (as well as the phrasing) of the heads is identical, as are the decks, opening paragraphs, etc. In fact, the best way to find out whether the item is a product report is to check the end of the story, to see whether it has a "circle" number for the Reader Service Card. The logo at the top of the page is a clue, too.

The subsequent pages of short reports are straightforward three-column makeup pages, with overscores on the headlines except where pictures are shown.

One additional element is shown on the page opposite: the boxed item. This handling is reserved for items deemed to be of special interest to the readership as a whole and thus deserving of a degree of emphasis greater than the regular, short report. Graphically it is handled the same way as boxed items in the news section.

Products-as-News page
↓
and
News-as-News page →

NEW PRODUCTS & SERVICES

Treatment trio tames organics, kills bacteria

Gamma rays, ozone, and activated carbon join forces to decimate even the hardiest viruses and bacteria in wastewater—and slash COD as well.

☐ Here's a pilot-plant-proven wastewater treatment process that eliminates chlorine disinfection and its related woes (see p. 49 for other chlorination alternatives).

Basically, the system consists of two pieces of hardware—an oxidation chamber and an irradiator/activated-carbon hybrid. The irradiator disinfects the stream and enhances oxidation of organics captured on the carbon surfaces. As an added plus, the gamma rays continuously regenerate the activated carbon, overcoming a major shortcoming of conventional activated-carbon columns—the need to be shut down and reactivated when the adsorbent becomes saturated.

And, because the brunt of the radiation dose is concentrated just on the organics—rather than on the entire wastewater stream—the system's operating efficiency reportedly is substantially higher than competitive radiation schemes, while costs are lower. For example, total costs for a 500,000-gal/d facility (with an organics loading of 250 mg/l) amortized over 20 yr are 28¢/1,000 gal.

HOW IT WORKS—Compressed air agitates the wastewater in an oxygenation chamber. The air bubbles through the wastewater, pressurizing the chamber to 32-35 psi, and ensuring that the optimum amount of oxygen dissolves in the water. From the bottom of the chamber, ozone is injected into the wastewater.

The ozone removes some color and kills some viruses in the chamber, but the primary purpose of both ozone injection and oxygen absorption is to raise the dissolved oxygen level to about 25 mg/l, which is necessary to oxidize the organics completely to carbon dioxide and water. The wastewater is then pumped from the oxygenation tank to the irradiator—a concrete vessel lined with 304 stainless steel and filled with activated carbon. In the center of the column are cobalt-60 rods. The organics attach to the column and are irradiated by the rods, dropping the dissolved oxygen content to 2-3 mg/l and reducing color by 90-99%.

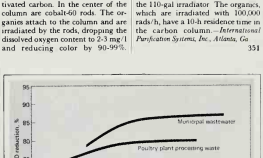
Then, ozone is injected into the discharge line to boost the dissolved oxygen level to about 14 mg/l.

The combination of radiation and ozonation produces synergistic effects, the firm claims: studies show that, alone, ozone kills just 95-96% of viruses and bacteria, and gamma rays kill only 99%. Together the kill is virtually 100%.

PILOT SUCCESSES—In pilot testing at Marietta, Ga. a 5,000-gal/d system has routinely processed poultry-plant wastes. The process consistently pares organics by 95%, the company says, even with influents that contain up to 1,150 mg/l.

The unit houses four cobalt-60 rods in a 2-ft-dia, 8-ft-high column that holds 600 lb of carbon. Wastewater is screened to remove solids, is then held in a 15,000-gal tank, and finally flows by gravity to an 8-ft³ oxidation chamber. Baffles split the chamber into five equal compartments, and air lines supply 35-40 ft³/h of air into each section. Wastewater residence time is 16 min in the oxidation chamber, and 30 min in the 110-gal irradiator. The organics, which are irradiated with 100,000 rads/h, have a 10-h residence time in the carbon column.—*International Purification Systems, Inc., Atlanta, Ga.*

351



Pilot tests show that within hours of startup, process pares COD.

Noah Bee

Plastics fair dazzles, but exhibitors complain

With current demand and prices at rock-bottom level, European producers have to look hard for a silver lining. Most of them are trying to raise prices back to old levels in the hope of boosting profits.

[illegible] their wares ups and downs at the Interplastic exhibition in Paris, which ran for six days (Jan. 7-12) at Floralies. West European firms joined with the previous exhibitors held in 1971, the quadrennial event attracted some 100,000 visitors and boasted itself a higher number of exhibitors (1,200) and stronger foreign participation (over 30%) than its predecessor. Except 1973, an [illegible] exhibition (up by a few dozen).

[illegible] said to be major European exhibitors [illegible] during the show were concerned over the poor current performance of Western Europe's plastics industry.

Even though most products enjoyed optimism for the future although they seemed to consider that the present economic downturn in Western Europe will be stopped by some capacity is plastics. At K '72, which [illegible] complained that cutthroat competition had forced down prices of Western European bulk plastics by about 35% this year. Meanwhile, raw materials prices have risen—e.g., by 15-20% in the case of naphtha. Benzene prices, after weakening in early 1973, have gone up too, due to increasing demand in the U.S.

Plant-capacity utilization is down to 75%, and the expansion of bulk plastics throughout Western Europe have been stalled by anticipation of an average annual growth in output of only 6.4% and a severe profit squeeze.

THE GERMAN CASE. In many ways, Germany's plastics industry is a microcosm of Western Europe's. Its 1973 production is expected to reach 6.27 million metric tons, slumped by 2.4% in the first nine months of 1973, thereby falling to the 1972 production level.

Capacity utilization now stands at 80-82%, and a marked improvement [illegible] which account for as much as 45% of total production remain sluggish. German companies [illegible] are some hopes on the U.S. economic recovery, but the U.S. market absorbs only 7% of German plastics exports, compared to 40% of the still-ailing EEC market. "For the next few months we do not expect any significant improvement," says Günther Metz, deputy head of Hoechst's plastics and [illegible] department.

The domestic [illegible] of Germans don't mind. Still, prices [illegible] 1973 will be 10-15% [illegible] plastics introduced [illegible] in the second half. "This naturally [illegible] pleasure. Getting BASF's polyester [illegible] but without making [illegible]," [illegible] Alf German Sc[illegible]

Modern structure at Düsseldorf's [illegible] exhibition hall displays its

NEW PRODUCTS & SERVICES

motor styles and capacities, normally in the 2-hp range, are optional. Headed for tough industrial applications, such as pumping hot titanium dioxide slurries, hot concentrated sulfuric acid, and Freon/nitric-acid mixtures, the unit features a Teflon/Buna-N double mechanical seal.—*R. S. Corcoran Co., New Lenox, Ill.* 360

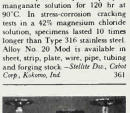
Portable monitor

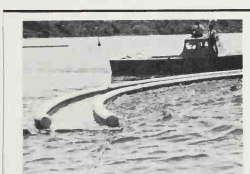
A portable opacity measurement system, the RM41P, can be used for accurate visible emission measurements, or for precise adjustments, fault isolation, and performance testing of electrostatic precipitators, baghouses, and other emission-control equipment. An optical transmissometer measures light transmittance through an optical medium such as smoke or dust. A 5-ft probe that fits into the stack houses the instrument's retro-reflector. A portable control unit indicates optical density and opacity corrected to stack exit conditions.—*Lear Siegler, Inc., Englewood, Colo.* 362

Alloy

This iron-base alloy provides corrosion resistance midway between that of austenitic stainless steels and nickel-, chromium-, iron-, and molybdenum-copper alloys. In the solution heat-treated state, the Haynes alloy No. 20 Mod has a room-temperature tensile strength of 84,500-94,900 psi. In the as-welded condition, a ¾-in.-thick plate has a room-temperature tensile strength of 95,100 psi; a 0.166-in sheet, 77,900 psi.

The alloy has proven itself in corrosion tests, the developer claims, no crevice corrosion or pitting occurred after immersion in boiling sea water for 432 h, or testing in a 2% sodium chloride plus 2% potassium permanganate solution for 120 hr at 90°C. In stress-corrosion cracking tests in a 42% magnesium chloride solution, specimens lasted 10 times longer than Type 316 stainless steel. Alloy No. 20 Mod is available in sheet, strip, plate, wire, pipe, tubing and forging stock.—*Stellite Div., Cabot Corp., Kokomo, Ind.* 361





Boom contains oil spills in fast-flowing water

The first oil-spill-cleanup boom demonstrated to be effective in flowing water with medium and fast currents (up to 2.8 mi/h) resembles two parallel strings of sausages floating on water. Each "sausage" is, in fact, a 50-ft-long flotation device that is coupled to the section next to it. The boom, which weighs only 2.1lb/ft, can be shortened and lengthened as desired, by adding or removing sections. Netting, fastened to a nonwoven material, runs the full length of the boom and links the parallel floats beneath the surface of the water. In operation, the boom is placed across the current flow at an angle. The oil and water flow under the leading float and through the netting. The water passes through the fabric while the oil comes to the surface between the two floats. A tangential current produced between the two floats carries the oil to the downstream end of the boom, where it is collected and recovered.—*Slickbar Development and Mfg. Co., Ltd., St. Catharines, Ontario, Canada* 353

Valves

This family of high-quality, low-cost industrial valves encompasses 253 sizes in 32 configurations, including iron-body gate, globe and check valves from 2-1/2 in. bronze-body gate, globe and check valves from ¼-4 in., and bronze ball-valves from ⅜-3 in. All the valves are available from the company's 15 regional warehouses, providing 24-h delivery to customers within 300 mi of these key cities.

The iron gate valves feature a fully guided solid-wedge disk, deep stuffing box, ductile iron handwheel, and flanged ends. They are available with rising or nonrising stems, and bronze or iron trim. For corrosive applications, a special nickel-iron bodied, stainless steel trimmed, gate valve is also offered. The bronze valves are all shell-molded for porosity-free casting, and the four different ball valves boast 15% glass-filled Teflon seats.—*Red-White Valve Corp., Carson, Calif.* 357

Protective coating

Fibre/Glaze CR, a chemical-resistant, fiberglass-reinforced protective coating, is said to be ideal for use on structural steel, piping, overhead railings, walls, floors, ceilings and tanks. Designed to withstand chemical fumes, abrasion and repeated

Normal products page

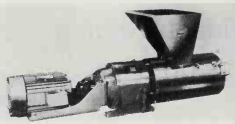
The emphasis here is on the group rather than the individual item; the clue to the grouping is, of course, the label headline. In the examples shown here from *Industrial World*, the "before" and "after" show the same approach to the same problem, but the "after" is considerably easier to assemble and it is, perhaps, a little more formalized and stylish. It is certainly more recognizable as a featured element in the magazine, issue by issue. On the following page is an example of the same technique used on a full spread. The first change is to split the recurring title of the department (Product Update) from the heading describing the specific subject in this issue (Air Compressors). This was done to allow the pages to become a part of a continuum of department pages, instead of being in a no-man's-land between department and feature. The second change is to establish design patterns that would simplify the process of page assembly without giving up the random, light-hearted quality of the pages to which the readers had become accustomed. A number of grids was prepared, allowing a variety of shapes as well as a different number of items to be accommodated per page. The items can be dropped into these spaces easily, thus avoiding the necessity to "design" each page separately every issue. A spin-off advantage: the modular grids which incorporate the department heading are the recognition symbol of the section.

On page 193 is a normal new products page from this same publication. It is handled as a normal three-column products page which usually has an item of double-column width to start off the section. Comparing the two sorts of product pages makes it quite clear how important it is to define the editorial and publishing purpose before graphic solutions that make expressive sense are attempted.

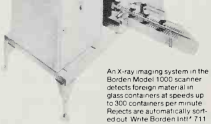
Product Update: FOOD PROCESSING

For skinning beef at a fast rate (up to 60 heads an hour) with less waste and only one operator, a Hide-Down Puller pulls up instead of down. The hydraulically powered rotating drum is raised and lowered by a telescoping piston. Hide rolls onto a drum when pulling and reverses to release hide. Write Anderson IBEC, 19699 Progress Drive, Strongsville, Ohio, USA 44136 **or circle No. 451 on Inquiry card**

An automatic unit that separates bone from meat contains less parts than former models, resulting in simple operation and maintenance. Only two major components move. The mechanical deboner is made from stainless steel. For more information write Stephen Paoli Int'l. Corp., 2531 Eleventh St., Rockford, Ill., USA 61108 **or circle No. 452 on Reader Service inquiry card**



The Hydrolock (left) is for the high speed sterilization of food product containers, up to 1,000 per minute. It is suitable for glass jars, rigid formed metal or plastic packages for multiple-sized cans or multiple grades of products. Write Rexham Corp., 1665 Elmwood Road, Rockford, Ill., USA 61101 **or circle No. 453**



An X-ray imaging system in the Borden Model 1000 scanner detects foreign material in glass containers at speeds up to 300 containers per minute. Rejects are automatically sorted out. Write Borden Int'l 711 3rd Ave., New York, N.Y., USA 10017 **or circle No. 454**

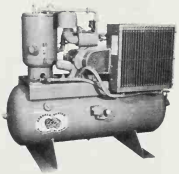
PRODUCT UPDATE

A line of packaged, stationary screw compressors consists of 50 models, from 50 to 500 hp. Three of these Pac-Air models are shown, from left, the 50-60 hp unit, the 75-125 hp, and the 150-300 hp. Units are either air or water-cooled, operate at 85 dBA. Write Ingersoll-Rand Co., 200 Chestnut Ridge, Woodcliff Lake, N.J., USA 07675 *or circle 456*

AIR COMPRESSORS

The portable 185 cfh Model Singl/Screw compressor offers balanced compression to reduce axial and radial forces that cause wear and friction. It operates at 30°F lower than twin screw types of similar capacity and discharges air at about 70°F over ambient. Write Chicago Pneumatic, 808 Country Club Dr., Bensenville, Ill., USA 60106 *or circle 457*

A BT compressor can be set on any flat firm floor without need for bolting. The air-cooled line comes in single unit packages ranging from 100 cfm to 250 cfm, and operates at below 80 dBA. Write Atlas Copco, Boomse Steenweg 957, Antwerp, Belgium *or circle 458*



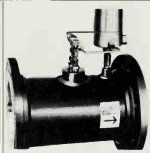
The Electra-Screw is a 30 hp oil-flooded, screw compressor available on a tank and base mount. Capacity is up to 132 cfm and maximum pressure of 175 psig. For more details, write Gardner-Denver Co., 1860 Gardner Expressway, Quincy, Ill, USA 62301 *or circle No. 459*

Designed for large volume air users, the Series 32 screw type unit is available from 200 to 350 hp. It is directly driven without gears by a 1770 rpm motor. The compressed air generator features two 13 in. diameter steel screws which eliminate wear. No foundation is required. An oil separating system is standard. For more details, write Sullair Corp., 3700 E. Michigan Blvd., Michigan City, Ind., USA 46360 *or circle No. 460*

PRODUCT UPDATE

Model 6654 gas-flow analog computer is designed to meet the needs of the natural gas industry. It's computational accuracy is ±0.1% full scale. A single run metering station is used to compute flow rate and total flow. Write Leeds & Northrup Co., North Wales, Pa., USA 19454 or *circle No. 456*.

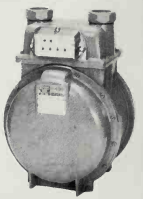
Fluids ranging in temperature from -45 to 310°C can be measured with the Brooks-Oval Flowmeter equipped with the model 4020 differential inductance converter. The oval rotors are the only moving parts in the metering system. It handles viscosities of less than one centipoise to in excess of 500,000 centipoise. Output is an electronic signal which is computer compatible. Write Brooks Instrument Div. Emerson Electric Co. Statesboro, Ga., USA 30458 or *circle No. 457*.



This no-moving-parts, vortex shedding flowmeter is suitable for use in pipelines six through 48 in. in diameter. The model 2510 provides a pulse-type output. It uses flush-mounted thermal sensors that enable slurries and dirty fluids to be measured. Write Eastech Inc., 2381 S. Clinton Ave., South Plainfield, N.J., USA 07080 or *circle No. 458*.

Designed for pollution control systems, this American Gas Sampling Meter accurately measures the volume of gas passing through a sampling train. The meter is usually placed between a gas analyzer and vacuum pump. It has a capacity of 140 cu ft per hour at ½ in. water column pressure across the meter. A front-mounted index with a large dial and a four digit readout displays meter reading. For details, contact American Meter Div., Singer Company, 13500 Philmont Ave., Philadelphia, Pa., USA 19116 or *circle No. 460*.

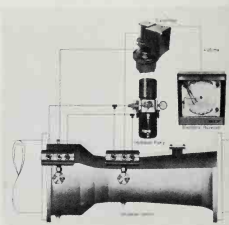
Leak testing and pneumatic testing is made easier with the DFF series Hastings fast response flowmeter. It has a dual relay control to operate an alarm or rejection device if the product being tested does not conform to specifications. Response time is one second for both flow rate indicator and limit relays. Write Teledyne Hastings-Raydist, Hampton, Va., USA 2366 1 or *circle 461*.



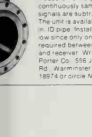
Model 400 is a light industrial gas meter with a maximum flow rate of 400 cfh. Maximum working pressure can be 10, 25 or 50 psi. Unit features weight saving aluminum alloy case with iron tops on aluminum center and covers. It has lubrication free internal components and bearings. Write Sprague Meter Co., 35 South Ave., Bridgeport, Conn., USA 06601 or *circle No. 463*.

FLOWMETERS

An ultrasonic electrode cleaning system is available with 50 mm to 900 mm 2800 Series Magnetic Flowtubes. This prevents fouling from coating buildup on the electrode. The Series 2800 flowmeters can be used with any conductive fluid and are unaffected by temperature, viscosity or pressure. Write Foxboro Co., Foxboro, Mass., USA 02035 or *circle No. 459*.



These spherical case meters are designed for reliable liquid metering in the range of 5 to 350 gpm. They have high strength and pressure resistance. Write Liquid Controls Corp., P.O. Box 101, North Chicago, Ill., USA 60054 or circle No. 462



Reduced power consumption and precise factory-established zero stability are features of the new Mag-X magnetic flowmeter. Measurement signal is continuously sampled and stray signals are subtracted from it. The unit is available for 6 to 96 in. ID pipe. Installation costs are low since only one conduit is required between flowmeter and receiver. Write Fisher & Porter Co., 516 Jacksonville Rd., Warminster, Pa., USA 18974 or circle No. 464

...es and sewage, the SBF (Solids Bearing ...metering system eliminates problems of ...fouled pressure lines and gas entrapment. It ...sensitive detection of flow signals produced ...in tube. Readings can be verified with a ...nometer. Write SIF, a unit of General Signal, ...ision Rd., Warwick, R.I., USA 02893 ...No. 465.

Harry Sperrals

NEW PRODUCT REVIEW

FOR MORE INFORMATION ABOUT THE NEW PRODUCTS DESCRIBED HERE OR ON ANY PRODUCT OR ADVERTISEMENT IN THIS ISSUE, PLEASE WRITE DIRECTLY TO THE MANUFACTURER ON YOUR OWN BUSINESS LETTERHEAD OR USE THE READER SERVICE CARD ON PAGES 43 AND 44.

Fork Lift Truck

The 6,000 lb capacity Model 1 MA-60H fork lift has a six-cylinder, 72 hp gasoline engine. Gradeability with rated load at 1 mph is 29.3%. Forward and reverse travel speed is 11 mph in high range, 6.75 mph in low range. Unit has full forward-reverse power shifting in low and high range.—White Materials Handling Co., White Motor Corp., 130 Ninth Ave., South, Hopkins, Minn., USA 55343 *or circle No. 395*

Process Pump

The Model 5A-VBD sanitary process pump has a built-in gear reducer for use where low material flow is desired. Supplied with an 1800 rpm motor, pump speed is reduced through belts and a built-in 3 to 1 gear reducer to about 350 rpm. Pump capacity: 8 gal per 100 revolutions. Ports are 1 in. x 1 in. Can be used with temperatures to 525 F, pressures to 450 psi.—Tuthill Pump Co., 12500 S. Crawford Ave., Chicago, Ill., USA 60658 *or circle No. 411*

Oil Burner

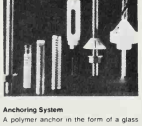
The HP series Iron Fireman oil burner is a compact forced draft pressure atomizing burner. It includes a burner, forced draft blower and a totally enclosed electrical control panel. Packaged unit is wired, piped, tested and ready for installation. It can be used in high or low pressure boilers. Available in 8 models from 7½ to 30 gph.—Dunham-Bush, Inc., 175 South St., West Hartford, Conn., USA 06110 *or circle No. 385*

Can Tester

Automatic testing wheel with 40 stations tests cans for tightness and rejects those with leaks. Cans enter revolving testing wheel individually where open end is clamped against a rubber seal and covered with a bell filled with compressed air. Pressure in testing bell is measured with sensors, calibrated in mm water gage. Faulty cans are automatically ejected.—Capacity: 400 cans per min.—Fried. Krupp GmbH, Altendorfer Strasse 100, 43 Essen, W. Germany *or circle 420*

Coil Stacker

Automatic coil stacker stacks coils on pallets positioned on a turntable after larger coils have been slit to size and banded. Palletized coils are removed from turntable by a discharge conveyor for weighing and processed for shipment. Unit which is equipped with ID and OD gripping mechanism handles coil up to 10,000 lb, OD to 72 in., height to 16 in.—Braner Engineering Inc., 9355 W. Byron St., Schiller Park, Ill., USA 60176 *or circle No. 400*



Dust Collector

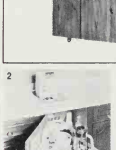
The Compact cell filter uses a non-woven filter cloth with a surface weight of over 0.1 lb per sq ft. Filter material is arranged in 40 kg cells constructed in modules of 3 or 4 units. By using cells instead of bags, space occupied is ½ of conventional bag filters. Filter is cleaned by short blasts of compressed air. Inspection and maintenance is done from the outside. Cells can be replaced in 3 min; cleaning interval: 2, 4 or 8 min.—AB Bahco Ventilation, S 19901 Enkoping, Sweden *or circle No. 389*

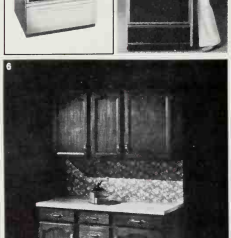
Anchoring System

A polymer anchor in the form of a glass capsule contains a synthetic resin glue with stronger adhesion than conventional anchoring systems. After hole is drilled in concrete or other material the capsule is inserted and anchor rod is rotated into the capsule, crushing it and causing complete mixing of resin. After curing, the synthetic resin glue binds the anchor rod to the building material providing a powerful, stress-free support in the entire hole with no lateral mechanical pressure on the building material.—Bolidt Elementenbouw B.V., Edisonweg 14, Alblasserdam, Netherlands *or circle No. 419*

Here and on the next spread are examples of typical catalog organization for large numbers of product items. The essence of the arrangement is to assemble the pictures into handsome groupings, keying each item to its descriptive text run elsewhere on the page. The problem, of course, is to devise a system so strong that the very variety of elements that must be accommodated serves as a visual advantage, rather than disintegrating into a disorganized grab bag of odds and ends.

One fact must be faced — the pictures are handouts (99 percent of the time), and there is neither





PRODUCTS: KITCHENS

1. Gas-fired built-in barbecue unit, "Hacienda Star," has gas burners, fire pan, ceramic briquettes, stainless steel smoke-flavor compartment and rotisserie. Heat is adjusted by turning and lowering fire pan of by gas-flame control. When unit is not in use, pourtee shut-off is provided. Easy-to-clean, grills fit in the dishwasher and slide-out drawer collects debris. A selection of venting systems is available. Goodwin, Berkeley. Calif. *Circle 351 on reader service card*

2. Built-in all-purpose appliance, "Foodmate," includes a blender, juicer, knife or scissors sharpener and mixing bowls and beaters. Unit, which can be installed in any cabinet of adequate size, closes flush with countertop when not in use. Latches hold each attachment firmly. Solid state control offers an infinite choice of speeds. Unit can be set for manual or automatic use. Optional attachments include a meat grinder. Ronson, Rotison, N.J. *Circle 352 on reader service card*

3. Dual-fuel electric range is ideal for vacation home use. Unit includes "stand-by" coal/wood or oil kitchen heater with two-burner cooking surface. Protection for woodwork and circulation of heat are provided by steel-shield behind back flue. Continuous cleaning oven stays spatter-free at regular roasting temperatures. Combination heating range is also available in gas and "Duo-Oven" models. Monarch, Beaver Dam, Wis. *Circle 353 on reader service card*

4. "Smooth-top" electric range features easy-to-clean cooking surface of ceramic glass. Continuous cleaning oven is fully automatic. Fast preheat and adjustable broiling are provided. Surface units have infinite heat controls. Range has elegant black-glass oven door with stainless steel trim. Classic White, Antique Copper, Avocado Green and Harvest Yellow are available colors. Optional rotisserie kit is offered. Kelvinator, Grand Rapids, Mich. *Circle 354 on reader service card*

5. Top-of-the-line electric range has self-cleaning oven and one-piece smooth top. Special "Autolatch" control eliminates need for manual locking of oven door before self-cleaning process. Each cooking area is clearly marked on smooth top. Unit also includes control console with easy-to-read digital clock for automatic timing, infinite heat control, and black finish on oven door. Line also features models with continuous cleaning ovens. Tappan, Mansfield, Ohio. *Circle 355 on reader service card*

6. Traditional cabinetry, "Patrician Pecan," complements almost any decor. Doors feature pecan veneer panels within solid frames. Panels are removable and a choice of decorator inserts can be used. Line has self-closing hinges and adjustable shelves in single-door wall cabinets. Base cabinets are 24" deep, 34½" high. Wall cabinets are 12" deep. Optional antique finished hardware is offered. Home-Crest, Goshen Ind. *Circle 356 on reader service card*

← This page shows product items in black-and-white. Some are plain halftones, others silhouettes within an area articulated by ruled outlines. Reference figures are surprinted or dropped out from the pictures themselves, and the space between is white, to add lightness to the page.

The spread opposite → is a montage of pictures all in full color. The frame in which they are encased is solid black, which yields good, decorative contrast. It is also a good (and cheaper) background for all the reference numbers.

Joe Davis

time nor money to get alternates. If the basic pattern into which the various elements are slotted is strong, chances are that the internecine warfare between the pictures can be diminished, even if it cannot be overcome entirely.

The most effective camouflaging ruse is to have a strong overall shape into which the pictures are dropped. This shape should be easily discerned — simple — and, as such, ought to be a geometric shape with clear outlines, as the examples shown here.

The next essential requirement is a highly visible and easily followed cross-referencing system between picture and accompanying text. Opposite, the numbers are superimposed on the pictures; below, they are dropped out of the grid between them; in both cases the numbers are large enough to be read easily.

The last essential requirement is flexibility of picture and text handling — for the editors' sanity if nothing else. The example from *Architectural Record*, on pages 196 and 197, reproduces the grid dummy and a typical page, to illustrate the ultimate in flexibility and efficiency: the pictures can be any shape and the text can be any length (within reason). Their placement, however, is rigidly controlled. Each picture must fit into the lower left-hand corner of the allotted individual space; the text columns must all start off at the same position on the page, though their length may be random. This rigid patterning is what holds the pages together and makes the entire sixty-seven-page issue (with 768 items) succeed as an organized catalog, easy to read and easy to tell edit pages from ads in spite of the fact that they both deal with essentially identical materials.

SECURITY

1. Deadbolt thumb-lever entry set Combines security and beauty. Units available in three styles feature six pin tumblers, hardened steel revolving bolt cutters, spun brass escutcheons and heavy-duty housings. Ameritech, Brookfield, Ill. *Circle 801 on reader service card*

2. "Embassy" lever set with a dead-bolt system has a pass-proof mechanism, all-steel internal workings and long life bearings. Units are available in antique brass or solid aircraft finishes. National Lock, Rockford, Ill. *Circle 802 on reader service card*

3. "Tamb-ga!" intrusion alarm for individual apartments or a complete building. Voltage unit. The key-activated system is designed to be easily installed in a hollow-metal door frame. Consentinal, Hicksville, N.Y. *Circle 803 on reader service card*

4. Traditional-style locksets. "Dorset" (left) and "Portola" (right), shown in satin chrome finish, are functional. Part of the "Classics" both models come in a choice of finishes to blend well into decor. Schlage, San Francisco. *Circle 804 on reader service card*

5. Early-warning fire detector is an ionization-type unit capable of sensing combustion at the earliest stages. The compact, solid-state unit can be mounted anywhere. Gard 888, Electronics, Aurora, Ill. *Circle 805 on reader service card*

6. Fire alarm control panel is for use on supervised, non-coded, single-zone systems. Unit features an audible warning signal, a silence switch, a reset button and an amber trouble light. Edwards Engineering, Norwalk, Conn. *Circle 806 on reader service card*

7. Residential fire alarm utilizes a solid-state ionization-type detector. Easily installed on ceilings, battery-powered unit has an audio warning that signals failure. Rockset, Anaheim, Calif. *Circle 807 on reader service card*

8. Heavy-duty tubular deadlock, "Model 921," has a 1" long deadbolt, a hardened-steel internal security ring, and a heavy gauge box strike. Unit comes in range of finishes. Arrow Lock, Brooklyn, N.Y. *Circle 808 on reader service card*

9. Tamper-resistant deadbolt lock has a protective steel latch case designed to fit the shape of the bolt and form a tight fit to the strike. The 1" throw bolt is rated "A" across Dexter Lock, Carol Rapids, Mich. *Circle 809 on reader service card*

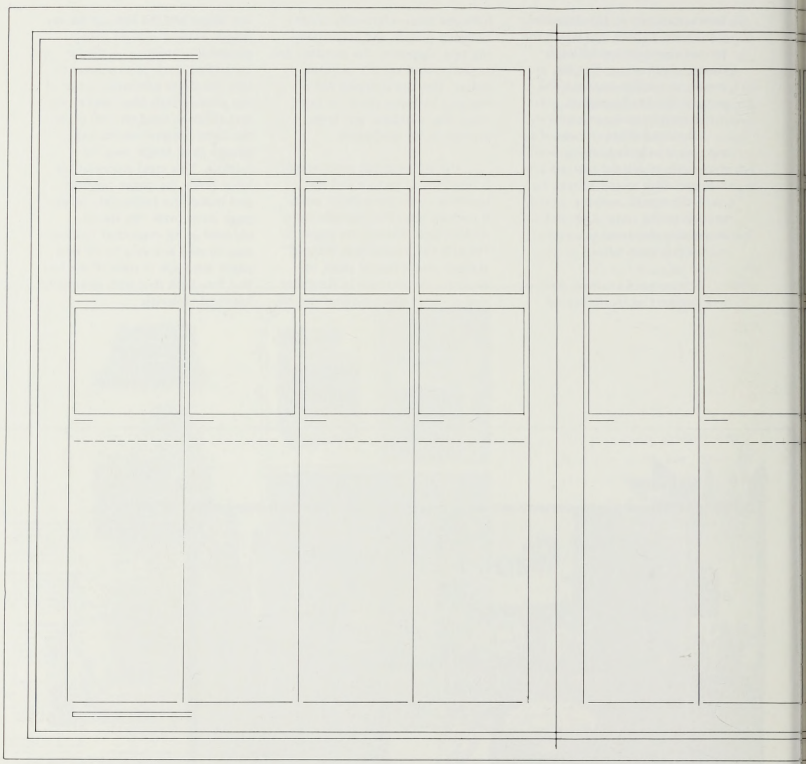
10. Residential smoke and fire alarm with battery backup and test button is capable of sensing fire at early stages. Easy to install unit includes a smaller circuit to warn of failure. Emhart, Berlin, Conn. *Circle 810 on reader service card*

11. Self-contained fire detector senses the presence of smoke and alerts family members or alarm farm. Several units available in a battery-powered model and a plug-in version. Westinghouse, Pittsburgh, Pa. *Circle 811 on reader service card*

12. Early warning fire and smoke detector is a self-contained, ionization-type device. Unit, which emits a loud, sustained alarm, is powered by a nine-volt battery and requires no hookup. Sears Roebuck, Chicago. *Circle 812 on reader service card*

13. Two traditional locksets. "Halo" (left) and "Marathon" (right) have concealed screw construction. Part of the Focus marketing, the easy-to-install sets fit doors pre-viously bored over Hartec, West Chicago, Ill. *Circle 813 on reader service card*

14. "El Cid" sectional handle set combines styling and security. Unit, with a rugged locking twisted handle, features a 1" deadbolt. Used on parts of an assign-installation, set comes in many finishes. Weiser, South Gate, Calif. *Circle 814 on reader service card*

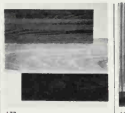


This grid is the basis for the layout of the entire issue...

... of which this is a typical page. Pictures are in both black-and-white and color. Where there is no section-opener headline as shown below, the fourth column would be used to accommodate three additional product reports.

uci 6

wood and plastics


177

178

179

180

181

182

183

184

185

ARCHITECTURAL WOODWORK
LAMINATED & PROCESSED SHEETS
LUMBER
PLASTIC FABRICATIONS
PLASTIC LAMINATES
PREFABRICATED STRUCTURAL WOOD

ARCHITECTURAL WOODWORK

177 ACRYLIC/WOOD / This is a polished product composed of natural hardwood impregnated throughout with acrylic plastic, subsequently hardened by irradiation. Oak, walnut, and ash moldings are available in four shapes. / Julius Blum & Co., Inc. A,I

178 CARVED WOOD / The company produces over 60 carved wood patterns that can be used for flexible wall set-ups, built-in furnishings, and room dividers. Systems include a choice of Walnut, Red Oak, Beechwood or select grades of White Pine with other woods available on special orders. / Stanwood Corp.

179 STRIP PANELS / Constructed of ¾-in wide strips of tempered hardboard with genuine teak, walnut or other hardwood veneers, or primed for painting, strips are mounted on a flexible fabric backing. Standard panels are 24 in wide and 96 or 120 in long. / Forms & Surfaces

LAMINATED/PROCESSED SHEETS

180 WOOD AND MIRROR / Sculptured-wood wall panels are available with Plexiglas mirror in ¾-in wide strips, set in grooves cut into modular panels of Redwood, hardwoods and in woods with durable color finishes. Panels are 11 in wide and 96 in long / Forms & Surfaces.

181 METALLIC LAMINATES / Suitable for fixtures and accent walls in banks, airports, hotels, retail firms, and theaters, Metallic Laminates are genuine aluminum and copper foils in a high-pressure laminated sheet. The 12 patterns are embossed and antiqued. / Wilson Art Co.

182 PLANK FILM / "Random Plank," a pattern in woodgrain vinyl film, is laminated to board and used in consumer and institutional furniture, kitchen cabinets and bathroom vanities. It is available from stock, or it can be custom proved in the colors of choice. / Phillips Films Co., Inc

183 PRELAMINATED PANEL / The panel, with a polyester surface thermoset to particleboard, comes in several woodgrains and solid colors and patterns, including "Butcher Block" as shown. Panel thicknesses range from ¼ to ¾ in in nominal 4- and 5-ft widths by 8- and 10-ft lengths / Ralph Wilson Plastics Co

184 SHEATHING / A fire-resistant structural sheathing can be used under most exterior finishes. It is clad in water-repellent paper, and attached with nails on staples / United States Gypsum Co. A,I

185 STRUCTURAL FOAMS / The material is reported to have higher impact resistance and increased thermal stability over other thermoset foams. Materials are composites composed of integral skin foams with reinforcing filaments, in sizes up to 10 ft wide by 45 ft long. / Xentex Co., Div. of Exxon Enterprises, Inc

Unillustrated text items of varying lengths but following some basic pattern are, in essence, another form of catalog presentation. The usual column width is based on three-columns per page, simply because this is the sort of material that is ideally suited to placement in the interstices between small space ads in split makeup pages.

Shown here are two pages from a highly specialized area of *Library Journal*, the Book Review section, which devotes some twenty to thirty pages per issue to this material. To add a modicum of variety to such extremely important but, alas, visually colorless material, several *ars gratia artis* elements were introduced:

1. To lend variety and texture to the type itself, the titles are set in boldface, and the ancillary bibliographic information is set in smaller, indented type. Thus the start of each item is clearly signaled by a different color and texture. Note that this is helped along considerably by setting the last few lines of the preceding item, carrying the reviewer's name and affiliation, in italics.

2. All department headings are set in a different, decorative typeface for visual variety: they are the raisins in the oatmeal. A choice of faces that express the meaning of each title by visual punning and

LIT

obedience," and *A Week* have been misunderstood and misused. By seeing Thoreau whole instead of in fragments, Wolf clearly demonstrates that Thoreau is "one of the great American moralist and creative religious thinkers . . . theologian of creation, apostle of wilderness and prophet of social action," in addition to being a skilled literary craftsman. His ideas on religion, state, ecology, and nature are relevant today as they were in 1862. A necessary book for libraries . . . big and small, school, church, and civic. *William White, Journalism Program, Oakland Univ., Rochester, Mich.*

Yunck, John A. tr. intro. & notes. **Eneas: a twelfth-century romance.** Columbia Univ. Pr. (Records of Civilization). Sept. 1974. 272p. bibliog. LC 74-9347. $10 . . . 1st

This book represents an outstanding and vital contribution for students of medieval narrative. The introduction sketches succinctly the major issues manuscript tradition, sources and influences (good discussion of Veldeke), the many omissions from and additions to the *Aeneid*, the poem's structure, the medieval translator's humor, his didactic concerns and attitudes towards antiquity. The adaptation, composed for an audience delighted by "narratives of the establishment and growth of civilization in Western Europe," offers a chivalric theme, a secular pilgrimage, and a sensitivity aware of the inner man on the long amplification on Lavine presents also "a landmark in the history of erotic narrative." Yunck has provided a superbly written and mostly smooth translation. The line-page critical bibliography is quite thorough. Available now for the first time in English, the work is indispensable to anyone interested in the birth of romance. *Raymond J. Cormier Dept. of French & Italian, Temple Univ., Philadelphia*

MUSIC

Laurot, Albert. **Concert Piano Repertoire: a manual of solo literature for artists and performers.** Scarecrow 1974. 330p. bibliogr. LC 73-15967. $10 . . . 801.: MUSIC

This handbook provides a survey of piano recital literature, with thumbnail biographical sketches of composers, short descriptions of individual works, and indications of the degree of difficulty. Unfortunately, although this volume is fairly comprehensive, it suffers from a number of failings. A major fault is the lack of uniform references to available published editions, particularly necessary for contemporary scores which are often published by small, relatively unknown companies. The author's highly prejudiced, subjective, and even offensive opinions about composers, compositions, and performers only serve to discourage inexperienced pianists from investigating the literature on their own. The artist or performer will be much better served by Maurice Hinson's thorough and scholarly *Guide to the Pianist's Repertoire* (*LJ* 7/73). *Susan Kagen, Dept. of Music, Brons Community Coll., CUNY*

MUSIC

Rathon, Carolyn. **Songbook of the American Revolution.** NEO Pr., Box 32, Peaks Island, Me. 04108. Jul. 1974. 112p. illus. by Nancy Hutson. bibliog. index. LC 73-81353. $8. pap. $4 . . . MUSIC

A harbinger of the bicentennial, this thoroughly documented collection contains ballads, hymns, and national songs, presenting both the rebel and loyalist points of view. Most of the texts originally appeared in newspapers and broadsides, with only the names of the tunes to which they were to be sung (it was then safe to assume that everybody knew them), so much sleuthing and fitting has been necessary. Most of these selections, except for the hymns and national songs originally published in score, are presented with only the melody line and guitar chords. Each song is headed with a historical note, and additional verses occupy the facing page. The illustrations "are mostly based upon details and border designs from colonial prints." Undoubtedly the book will meet a demand. *Philip L. Miller, formerly at NYPL.*

Shanet, Howard. **Philharmonic: a history of New York's orchestra.** Doubleday. Jul. 1974. 592p. illus. bibliogr. LC 72-96756. $20 . . . MUSIC

Shanet has delved into the early history of the orchestra, into correspondence, diaries, and contemporary accounts to give a thoroughly documented, scholarly history of the orchestra from its beginnings in 1842 until 1970. His account of cultural life in New York during the 1840's, with its rich literary, theatrical, and musical activity, is particularly interesting. The reports of the Mahler and Toscanini years are especially valuable and the records of the orchestra during two world wars and one civil war are of substantial interest as well. The appendixes include backnotes, copies of early criticism, and a full record of performances, 1842–1970. This excellent study is a valuable addition for American studies, New York history, and music collections. *William Shank, C.C.N.Y. Graduate Sch. Lib.*

Sheetack, Melvin. **The Country Music Encyclopedia.** Crowell. Sept. 1974. 400p. photogr. index. LC 74-9068. $14.95 . . . MUSIC

Much of the appeal of country music lies in its directness and its reflection of the simple dramas of life. Sheetack uses this straightforward unsophisticated approach in his intimate portraits of several hundred country music personalities: singers, songwriters, instrumentalists, and producers. The basic biographical facts and the most important songs of the musicians are worked into these specialized critical essays which often quote their song lyrics and sayings. The book is apparently modeled after Stambler and Dandon's *Encyclopedia of Folk, Country and Western Music* (*LJ* 11/16/69) and as a reference tool is similarly helpful, although it is, of course, more up-to-date. Many musical terms are defined, sometimes with a country twist. Hundreds of photographs, a lengthy discography, a few well-chosen printed scores of country classic songs and a rather redundant index accompany the text. For country music enthusiasts this book is a joy to browse through and a fascinating compendium of personal anecdotes. *Stephen M. Fry, Northwestern Univ. Lib., Evanston, Ill.*

MUSIC

Walton, Charles W. **Basic Forms in Music.** Alfred Pub. Co. 1974. 210p. illus. index. LC 73-85169. $7.95 . . . MUSIC

Written by a widely respected theory teacher, this book provides a brief description and analysis of the various forms which have been used in music for centuries. The explanations are relatively simple and easy to follow. Analysis is aided by including the complete musical score when each form is presented for the first time. Although this book breaks no new ground, it is recommended for medium-sized and large libraries because of the clarity of the explanations, and its inclusion of many examples from 20th-Century music. *Hillel Axelbel, New Rochelle P.L., N.Y.*

Young, Percy M. **A Concise History of Music: from primitive times to the present.** David White. Jul. 1974. 186p. illus. index. LC 72-92990. $8.95 . . . MUSIC

This brief, readable survey emphasizes "music as a collective art." Relatively little attention is paid to musical styles, individual musicians, or to the various forms of music. However, the relationship of music to religion, magic, nationalism, social institutions, technology, and to other arts is explored in depth. Recommended for YA and adult collections. *Hillel Axelbel, New Rochelle P.L., N.Y.*

Philosophy

Berry, Adrian. **The Next Ten Thousand Years: a vision of man's future in the universe.** Saturday Review Pr. Dutton. 1974. 256p. LC 73-16791. $8.95 . . . PHIL

This is no ordinary book on the future, too many of which are infected with a combination of myopia and social hypochondria. Berry's outlook is much broader and deeper than the views of such people as Ehrlich or the Club of Rome, which he dismisses briefly. This a broad treatment outlining in general terms what kinds of things we might expect in the future the harnessing of greater amounts of power, the taming of the planets, and then beyond, to the stars, where our destiny must ultimately lie. Bacon, he claims, has set us on a course we cannot alter. This work is everything it promises to be: a vision, that all too rare thing, of what is forseeable in man's future. An essential purchase. *Robert Molyneux, Virginia Polytechnic Inst. & State Univ. Lib., Blacksburg*

Dufrenne, Mikel. **The Phenomenology of Aesthetic Experience.** Northwestern Univ. Pr. (Studies in Phenomenology & Existential Philosophy). 1974. 576p. tr. by Edward S. Casey & others. bibliogr. index. LC 73-7408. $17.50 . . . AESTHETICS

Dufrenne is a prominent French philosopher and one of the few French phenomenologists to explore aesthetic phenom-

humor was attempted, but there are many interpretations possible and what may be an innocuous tease to one is an offensive slur to another. So in the end the only one we all agreed on was MUSIC, for which the lettering is multilined and thus reminiscent of a music staff. Oh well . . .

3. Vertical hairlines are inserted between columns, since this is done elsewhere in the publication, used as a splendid light foil to whatever blackness may be around and hence an increase in "colorfulness" by contrast.

4. The hairlines are extended into the top margin where tiny flags are attached to them, each referring to the subject area of the column below in much the same way that the telephone directory runs alphabetical syllables in the top corners of each page to help easy reference — a highly utilitarian element which yields decorative and unique value in the bargain.

5. The few illustrations in the section are suspended in boxes attached to the vertical rules. Why? Well, when one has little to work with, it is essential to make the most of every opportunity to do something a bit different and original. An overall impression is actually built up of a large number of tiny details.

SOC SCI

format book was designed by the Swedish publishing firm of Try Trycksaks. The text is relatively brief, but in conjunction with the substantial captions to the illustrations, manages clearly and effectively to trace the development of ships, trains, cars, and aircraft from their beginnings to the present. The real strength of the book, however, and the heart of the story, is visual. The hundreds of illustrations are almost all line drawings, many washed with color. The style is semi-diagrammatic, and rich in detail. This is not the kind of book likely to be read from cover to cover, but it's a pleasure to browse through it. *B.C. Hacker, Dept. of History, Iowa State Univ., Ames*

Social Science

Bramer, Nieth Winther. **Indian and White: self-image and interaction in a Canadian plains community.**
Stanford Univ. Pr. (453), 20mo, illus.pgs. index LC 74-21907. $6.00

Bramer's analysis of social interaction between a small group of Canadian Cree Indians and their white neighbors is an important contribution to societal studies. Especially significant is the persistence of ethnic identity which he finds. There is little evidence of melting pot activities between the Indians and the whites, in fact, relations between them appear to be deteriorating over time. Bramer concentrates on showing how the two groups respond in daily life to perceived "facts" of their social existence, with fulfilling roles but built groups consisting of both "substantive and symbolic transactions" between Indian and white. Bramer describes the historic development of the relationship between the two groups, as well as the current daily life of the groups. Well-written and of value to the general reader as well as the anthropologist. *Ruth F. Olson, Nuuxei Regional H.S. Lib., North Eastern, Mass.*

SOC SCI

Campbell, Joseph. **The Mythic Image.**
Princeton Univ. Pr. (Bollingen) 1975. 550p. illus. index LC 74-28126. $45. until May 31, 1975, $37.50.

Campbell lets "the spirit of the pictures rule," arranging his text "so that the reader might enter into its pages at any turn he liked." The result is a fascinating compendium of mythological stories which illuminate the book's more than 400 illustrations, and what illustrations! Drawn from hearts all parts of the world and all epochs, they luminously support Campbell's dual thesis that the ultimate source of myth is man's unconscious, and that many of the most prominent mythic motifs have diffused from a single center. These arguments are commonplaces, but they are seldom made with such concreteness and beauty. My only quarrel with Campbell is that he neglects Islam and devotes rather too much space to Buddhism, where many of the key terms have almost ceased to function symbolically. But this is my preference, in the structure of *Image* the attention paid to Buddhism is apposite and, for me, in some measure redeemed by Campbell's unfailing lucidity and attention to details. *John Agar, Dept. of English, Kalamazoo State Coll., Ga.*

Gottschrer, Barry. **The Mayor's Man.**
Doubleday 1975. 19cm. index LC 75-8919. $6.95 (ISBN 0-385-03000-0)

Gottschrer writes of the Lindsay years from the viewpoint of his own unique job: the quelling of violence. The task-force network of black community relations ships and communications he patiently established to achieve this became a model for other cities. But the author also writes here with clear-brilliant perception of white violence e.g. the Columbia University riot, and Stanford school strikes. Gottschrer's book offers a candid, detailed, meticulously accurate history which nonetheless disappoints in one way. This reviewer worked in New York's black communities at that time and witnessed firsthand the tremendous power of the mere name Gottschrer to prevent riot and reduce police brutality. He was never

One of Kelly's "Hoboes" —part of the American Waste Land

SOC SCI

more than one telephone call away, and all factions knew that. So one would have liked to know who was Gottschrer himself, and how did he inspire such trust and friendship in blacks? Because that was largely why New York did not burn. This he does not tell us, perhaps because he never knew himself. The book reveals him only as watching from the sidelines, considering all the facts, and doing what he could, which he didn't think was much. *Elisabeth Hutchins, New York*

Kelly, M. Clark. **Hoboes.**
Drake. May 1975. 192p. illus. LC 74-32544. $12.95 (ISBN 0-87749-)

Now, as in the past, Kelly tells us, hard times are compelling people to hit the road, and perhaps current wanderers will be interested in knowing something about the history of the hobo. His focus is on the early 20th Century when the searching of the itinerant industrial workers reached a characteristic style: riding the rails, hanging out in hobo jungles, eating mulligan stew, etc. (I was interested to learn that there's a difference between hobos, tramps, and bums: hobos look for work.) Kelly describes the hobo's life style and the hard times, and talks about some famous ones, including Jeff Davis, "A No. 1," Jim Tully, and "Steamboat" Mears Tatum. Not a bad list, as it turns out. It's hard to know what to make of the book itself. It's not very well written, but does have some charm nonetheless, and though it's by no means a major study, it does add to our knowledge of a little-known subject. Not essential, but recommended if you can afford it. *Sheldon Agar, Rochester P.L., N.Y.*

Mintz, Sidney W. ed. **Slavery, Colonialism, and Racism.**
Norton 1975. 207p. index $10.95 (ISBN 0-393-05521-5)

Each of the 11 essays in this broad-ranging and important collection surveys a major aspect of the black experience in Africa and the Americas. Historical perspectives are stressed, but attention is also given to literature, music, and education, the historical development of the literature if each of these subjects is emphasized throughout. Besides Mintz (an anthropologist who specializes in the Caribbean), well-known contributors include David Brion Davis (slavery), Philip Curtin and J. F. A. Ajayi (African history), and Benjamin Quarles (American history). Most of the contributions are sure to be regarded as seminal commentaries on their respective fields, and the book will be sought out by a variety of scholars, teachers, and students, especially as it comes during a major transitional phase in a field of enduring importance. Essential for academic libraries. *R. Kent Rasmussen, Dept. of History, U.C.L.A.*

Perlman, Robert. **Consumers and Social Services.**
Wiley 1975. 329p. index LC 74-11640. $9.95 paper $5.95 (ISBN 0-471-67015-X)

This book defines the recipient of social services as a consumer who seeks to acquire those services that will satisfy his needs. It examines in detail the interaction between consumer and supplier, with consideration of the types of con-

Literature reports displayed in legible, modular pattern

Reducing the space allotted to each report from a sixth of a page to an eighth occasioned a re-examination of the entire graphic presentation technique leading to a complete overhaul of the typography, though the picture size was retained. The headlines were set in two bold, tight, stacked lines — and placed aligned across the page for speed of scanning, as a service to the reader. Descriptive text, set narrow and ragged right, can vary in length. The "for more information" line was reworded and the numeral strongly emphasized, as a service to the reader. (The success of this publication is measured by the number of items requested. After the new format was introduced, the requests were increased some 350%). As yet another service to the reader, checkboxes next to the headlines were incorporated into the vertical rules needed to separate the items. As in the case of *Industrial Equipment News*, a sister publication, see page 16, it was important to devise a modular system for speed and simplicity of assembly: as a result, all the ruled lines and "for your copy" lines are standing art in film, and the headlines and body copy, as well as the pictures, can be stripped into indicated positions very easily.

Cold air gun

Four-page idea brochure describes the Vortec 606 Cold Air Gun for production spot cooling, and comes with a handy machining feed and speed slide-rule calculator. Clean, efficient cold air gun generates a steady stream of air at 10°F without electricity or moving parts. It helps extend tool life and maintain production tolerances without oil residue or dangerous chemicals. Brochure shows typical applications for air guns, highlights advantages and explains operating principle. **Vortec Corp.**, 10125 Carver Rd. Cincinnati, OH 45242

For your copy circle ILR **103**

Reconstruction, renovation work

Twelve-page brochure has case histories and before-and-after photos that dramatically illustrate Robertson building reconstruction and renovation services. Extensive retrofitting and remodelling capabilities make old structures attractive and energy efficient. Included are industrial, institutional, and residential projects, with specific energy savings. Brochure also details insulated roof and wall systems, outlines company's maintenance services, and discusses computer analysis capabilities. **H. H. Robertson Co.**, 400 Holiday Dr., Pittsburgh, PA 15220

For your copy circle ILR **104**

Industrial intercoms

New catalog shows intercoms designed to give efficient communication in areas where high ambient noise levels make conventional voice systems ineffective. Typical applications include stations adjacent to heavy production machinery, on loading docks, in steel mills, etc. Heavy-duty intercom housing is fully sealed against dust and dirt; corrosion-proof, weather-proof for use indoors or out. Simple installation requires plug-in power, ordinary 2-wire connection. **Atkinson Dynamics**, 14 Orange Ave. South San Francisco, CA 94080

For your copy circle ILR **105**

Power cylinders

Pneumatic hydraulic cylinders are just one of nine complete product sections featured in the Full Line Product Guide section of Schrader Bellows new Product Digest PD 3. All necessary technical specifications on the entire line of Schrader Bellows products are given in a special 20-page product section to make selection easier. Guide also has an 8-page 4-color section on available services. **Schrader Bellows**, 200 W. Exchange Street, Akron, OH 44309

For your copy circle ILR **106**

Energy saving exhaust damper

Four-page brochure details the Protectaire energy saver and fire protection system for paint spray booths, welding enclosures, and other work areas served by exhaust fans. Motorized damper closes automatically when spraying is done, to keep heated (or cooled) air in. Temperature sensing switch also closes damper in case of fire to prevent flames from spreading to roof. Illustrated Bulletin PA-181 explains system operation, shows elements, and accumulates specific cost savings for typical applications. **Protectaire Systems Co.**, 13515 McLean Blvd, Elgin, IL 60120

For your copy circle ILR **107**

Contract manufacturing

Color-illustrated, four-page brochure explains how to meet special manufacturing or parts production needs with Gleason contract machining and assembly services. It highlights company's more than 115 years' experience in building machine tools. Shown are Gleason's complete machine shop with more than 900 machine tools; expert assembly facilities for complete machines or components; and large assembly areas. Bulletin covers company's expert design assistance capabilities. **Gleason Machine Div.**, 1000 University Ave, Rochester, NY 14692

For your copy circle ILR **108**

Electrical assembly

Concise data sheet tells how Gleason contract assembly services meet almost any electrical standard, anywhere in the world, including JIC (USA), IEC (International), and IEEE, VDE or DVS (Germany). Assembly capabilities include relays, control panels, push-button/control stations, printed circuit boards, junction box and switch gear assemblies. Flyer outlines company's more than 115 years of electrical assembly experience. **Gleason Machine Division**, 1000 University Avenue, Rochester, NY 14692

For your copy circle ILR **109**

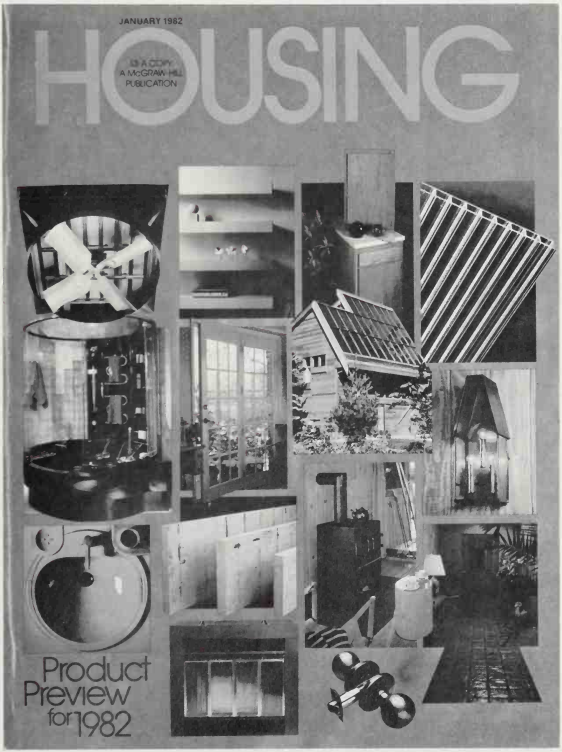
Precision spindles

Four-page brochure details Gleason high precision spindles, delivered on time and designed to meet customer's needs for boring, drilling, and other machining operations. Design guide has dimensions of cartridge type spindles with all bearings, block types with ball bearings, and block types with front taper roller bearings. Gleason has more than 115 years experience building machine tools, and uses the latest equipment and computerized design and manufacturing facilities. **Gleason Machine Div.**, 1000 University Ave, Rochester, NY 14692

For your copy circle ILR **110**

A word or two about new product pictures

Most new product pictures are handout shots, literal, poorly composed, unimaginative, and atrociously printed in bulk . . . in sum, depressing and awful. Yet we are forced to run them since we have no alternative. We must not despair nor pretend that they are better than they are. It behooves us to make the best of a difficult job. One fundamental point to remember (whose result can be seen several times over in this montage) is to think of each such product shot as raw material ripe for manipulation, rather than as a final work of art. So, by all means blank out the background to leave an interesting silhouetted shape; or cut away just a part of the background so an element appears to poke out from the picture into the surrounding space in partial silhouette; or overlap one picture with another; or establish visual relationships of alignment from one to another and so on. The group shown here is, clearly, made of excellent originals in vibrant color. Even so, it would have been much less interesting, had they been displayed as little rectangles arranged in shooting-gallery fashion.



Housing, Joe Davis

NEW & NOTEWORTHY
By Mike Bittel

Pentax ME-F & SMC Pentax AF 35–70-mm f/2.8

Kodak Ektachrome 14 Paper

Canon Speedlite Models 577G & 533G

Camera Arts, Thomas Ridinger

Items handled like dignified news stories with elegant typography and subtle variation in weight of rules.

HARDWARE

OFF-LINE

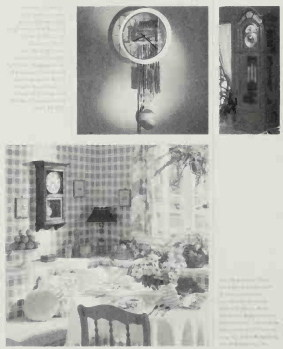
8 INCH RIGID DISK

TRANSACTION TERMINAL

MAINFRAMES

Datamation, Cleve Marie Bittell

At left, a news report on technological development is set off by typewriter type from the ordinary revieas at right.

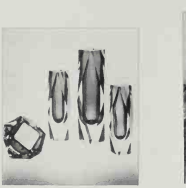

NEW
THINGS

Moving House & Home, Nancy Steiny

The generous white space is carefully articulated by hairline rules that establish the four-column-plus-wide-margin structure. Product pictures and descriptions are dropped in strategically, establishing a stylish look with the simplest of means.

Casa Claudia, Omar Grassetti

Two radically different approaches from the same publication. Above, a regular catalog format with carefully controlled photos of similar objects against a neutral-color background. Below, a deliberately jumbled collection of odds-and-ends in lively notebook fashion.



Flowers & Haine Anderson, Dugald Stermer

One of several spreads in each issue devoting two-to-a-page space to significant product reviews. Precise alignment at the middle of the pages allows the pictures to be sized to any convenient height, and the text to be written to any length. Lack of headlines underscores soft-sell atmosphere.

NEW & INTERESTING

DOUBLE VISION

New York Auto Enterprise is the Magpul Twin Lens mirror. The mirror (5 light rail, two bracket lenses) are for viewing the traffic directly behind you. Mounted on the rear window, vehicles pull by and go out. Consequently, the dangerous blind spot is eliminated. The lenses themselves are brace clear and are said to be anti-distorting. A universal mount fits nicely to an many installations. The mirror is made of lightweight, high impact plastic and imported parts. Further information write: Auto Enterprise, Dept. P, 1340 Carbon Ave., Bellflower, CA 90706.

GO FOR IT

Hickey Enterprises introduces extensive bumps with two new pistol units. For non bar-equipped trucks, Hickey has designed a grab handle made of strong black nylon. It will bolt to 2-inch hitch. The handle measures 12 inches long and is welded to the Hickey offers a chrome plated grab bar for interior and exterior applications. It's small enough to fit into most dashboards but strong enough to span the width of knuckles. The bar is 12 inches long. For information, fit any vehicle, and retails for $9.95. For details, contact Hickey Enterprises, Inc., Dept. P, 1340 Carbon Rd., Ventura, CA 93003.

CONTACT CLEANER

Bel-Ray Co. Inc. extends the life of spark plugs, breaker points and switches with Spark Plug & Electric Contact Cleaner. The cleaner not only cleans corrosion, oil and dirt from electrical contacts and does its best, but also helps prevent moisture from forming. Bel-Ray says that it won't harm plastic components. Retailing for $3.95 per 12 oz. can, Spark Plug & Electric Contact Cleaner is available at many motorcycle stores or from Bel-Ray Co., Inc., Western Office, Dept. P, 14870 Firestone Blvd. Suite 410, La Mirada, CA 90638.

WIDE ANGLE WINNER

The Alpha Corporation mirror gets the blind spots in driving with its wide-angle lenses. Constructed of high-impact polystyrene, the Alpha unit includes four to five degrees more visibility than conventional mirrors. Wide reports that the mirror can be installed easily using simple hand tools. The five-piece mirror weighs 10 oz. and is priced at a suggested retail of $16.95. Both styles include universal mounting brackets. For details, contact Alpha Corporation, Dept. P, 5411 20th St. S.W. Lynn wood, WA 98036.

HOLLOW TABLE

Another addition to the Pro-Top portable wooden table that rolls into a 20-lb package measuring only 7 in. in diameter and 36 in. in length. Set up in seconds, the table is to put into an area 3 ft square and 24 inch tall. The imported wood and top has been treated with a clear lacquer finish and a vinyl-covering handle helps keep transport. Retailing for $39.95, postpaid. Pro Top's table can be obtained from Dick Cepek, Inc., Dept. P, 9061 California Ave., South Gate, CA 90280. California residents must add 6 percent sales tax.

TUBE GRILLES

Tube manufacturer Tube Specialties has introduced tube grilles for Chevy GMC pickups, Blazers, Jimmys, Ranchero grills and Bronco grills. Made of 1-inch diameter 16-gauge T-304 steel tubing, the tubes are welded to predrilled steel brackets for easy installation. Available in triple chromed plate or black finish, the grilles are said to be tough. The grilles are priced at $89.95 for 4WD Ranchero grille and $49.95 for Ford pickups. For details, contact Tube Specialties Inc., Dept. P, 1305 Monrovia St., Buena Park, CA 90621.

KID NAPPER

Ad Products has introduced a line of safety restraint harnesses. It includes adjustable shoulder harnesses and lap belt assemblies for campers—the Riding Cab and the Two Piece Topper. Available in three widths and one length (60 in.), the belts are said to withstand 4000 lbs. pressure or 1800 kg. (3,648 lb). Interiors are fully upholstered in a plush polyurethane green blue foliage, including the ceiling and walls. Each unit has two lights, smoke tinted windows and a roller window shade. Retailing for $249.95, the Kid Cab will hold four adults; each unit will also hold each 73 in long. The exterior is a rigid unitized design covered with white cedau vinyl, included as standard equipment is a bed to separate the camper from the cab. Ad Products Co. Inc. is located at 1000 Ad Products Dr., Ada, OK 74820.

COOL IT

Rapid Cool, the manufacturer of an anti-condensation coolers has entered the recreational vehicle field. Available in all forms is the Tamper Intercooler or cooler. Rapid Cool claims that the Tamper Intercooler has no moisture in its cooling system that which can be expected from the vehicle's original equipment cooler. The unit is compact and because of its 12 quart storage capacity ends in installation requires only a screwdriver and a pair of pliers. The unit is priced at Tamper. Hoses and installation instructions. For vehicles to 11,000 lb GVWR, Rapid Cool provides its model 1004 which ranges for $41.95. Other models are available for larger vehicles. For additional information, contact Rapid Cool Corp., Dept. P, 2210 S. Dupont Dr., Anaheim, CA 92806.

TWIN STACKS

Carbon Hood Ram Systems has introduced some bolt on power for Toyota pick-up owners. The Twin Stacks System is available for the 20-R engine with a Weber carburetor mounted on a Clarion Powerplate cast aluminum manifold. The kit includes the carburetor, manifold, linkage, gaskets, all necessary mounting hardware and a performance camshaft. Price for the suggested retail price for the Clarion manifold and linkage is $99.95. The Weber carb comes through Clarion for $145. For additional information contact Clarion Induction Systems, Dept. P, 2741 Toledo St. Torrance, CA 90503.

ROLLING GIANTS

Dick Cepek has added a new entry to his stables of off-road tires—the Quad Trac. Available in sizes from 31 in. to 38 in. in 5 in. increments and 11 in. or 12 in. tread width. The nylon cord tire sports raised block letters and is supplied in Load Range C in three sizes—14.5K x 15-16, 16 x 16.5 and 16 x 17.5. Owing to its rounded shoulder design, Quad Trac is said to be ideal for sand and snow driving. Tire prices range from $89.95 including federal excise tax. For more information and a free catalog, write Dick Cepek, Inc., Dept. P, 9061 California Ave., South Gate, CA 90280. Include your zip code number.

BUSTED BRONCO

For the Bronco owner who has severed driveshaft, Duffy's Enterprises offers a replacement driveshaft for Bronco models. The shaft and joint assembly retails for $117.25 and, according to Duffy, this price is considerably less than the identical shaft listed. Find the more information write Duffy's Enterprises, 16611 Normandie Ave., Gardena, CA 90247.

TOP TREATMENT

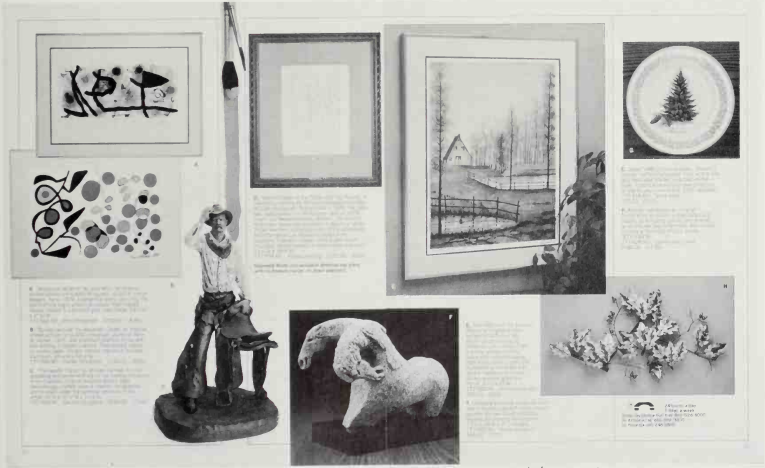
New Top Cade Corporation Corp. has introduced a new line of camper and pickup canopies. Top Cade is said to clean and maintain convertible window tops and windows, seat covers, upholstery, metal trim, plexiglass and formica. The non-abrasive spray cleaner is said to be safe for use on vinyl, fabric or leather—on any surfaces and one for vinyl windows. The kit retails at the suggested $5.95. It can be purchased from local auto supply stores or direct from Write: Dept. P, P.O. Box 1209, Colorado Springs, CO 80901.

Pickup, Van & 4WD

Gray background within boxed area gives unified flavor to this fully-packed presentation. Rigid adherence to sizing all pictures to the full column width can, however, play havoc with the perceived scale of the objects to each other. (That spray can is somewhat large!)

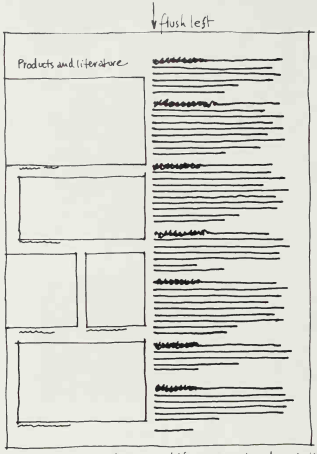
Attenzioni, Paul Hardy

Masterful handling of a variety of silhouetted pictures to achieve maximum graphic impact from the composition as a whole... pictures superimposed onto an underlying five-column grid shown by vertical hairline rules and regular placement and width of text blocks.

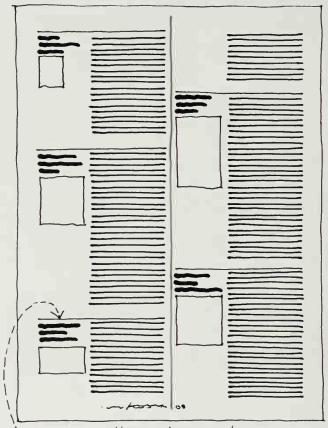


Marchow Collection

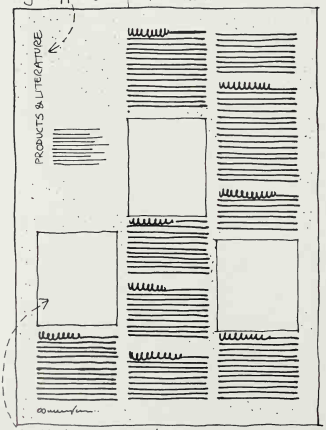
Graphic organization of these catalog pages is achieved by means of light-ruled boxes that encase groups of items. The arrangement is enlivened by the fact that several pictures interrupt or overlap the boxes, thus creating a "trompe l'oeil" illusion of dimension.



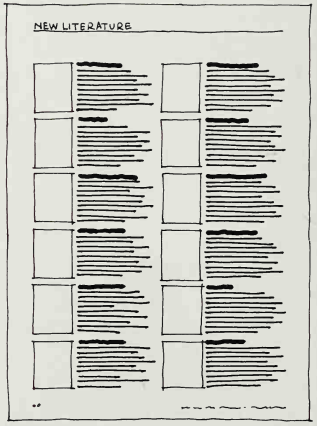
Pictures neatly random Boldface repeats description beneath pictures



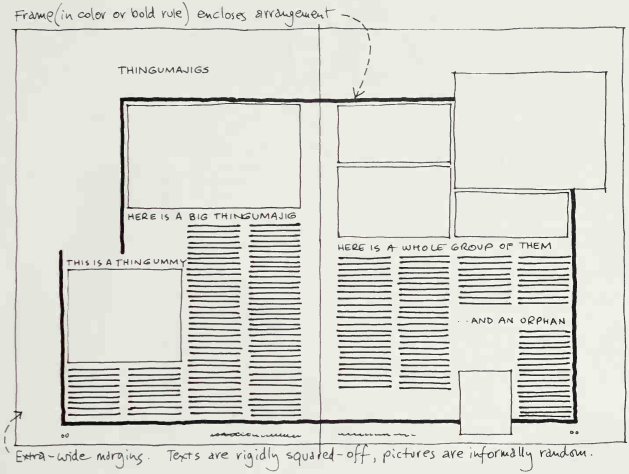
Rule with headline below it at left, text below it at right. Illustration (if any) is placed below headline.



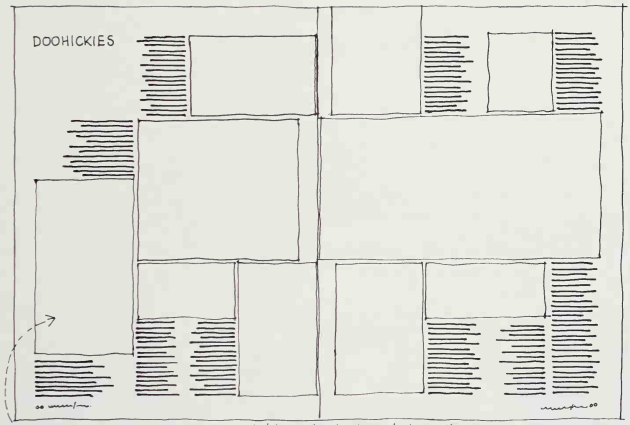
Full-bleed color over whole page, except the illustrations, which run in plain black ink



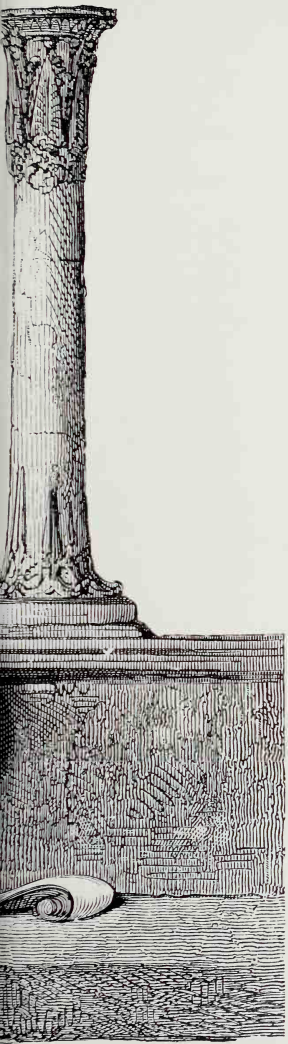
Modular arrangement of covers and descriptions


Frame (in color or bold rule) encloses arrangement
THINGUMAJIGS
HERE IS A BIG THINGUMAJIG
THIS IS A THINGUMMY
HERE IS A WHOLE GROUP OF THEM
AND AN ORPHAN

Extra-wide margins. Texts are rigidly squared-off, pictures are informally random.



Informal picture arrangement surrounded by individual product captions



INDEX

Cartoons, 125
Color, from rules, XI
Contents page, design approach, 37, 38, 45, 50, 52, 53
  errors, 36, 38, 42, 44
  reference guide, 45, 50
  requirements, 33–35
Contrast of editorial and ads, 89, 126, 150, 152
Covers, 1
  format, 3, 4, 5
  frames, 8
  gatefold, 10
  illustrations, 2, 4
  lines, 2, 9
  white or black? 9, 10
Department headings, 70, 73, 104, 105, 106, 107, 162
Departments, 89
  as a continuum, 90
  design considerations, 79 et seq.
Designers
  Arturo Alvarez Acevedo, 13
  Elaine Anderson, 204
  Max Batchelder, 22,23,63
  Noah Bee, 8,188
  Walter Bernard,84
  Roger Black 56,117
  Cleve Marie Bontell, 84,202
  Stanley M. Braverman, 111
  Michael Brent, 119
  Alberto Bucchianeri, 15
  Ronald N. Campbell, 62,113,143
  Henry Chaucheprat, 55
  Bob Ciano, 58
  Richard A. Craig, 143
  Joe Davis, 30,84,186,194,201
  John deCesare, 24
  William Delorme, 55
  Pedro De Oliveira, 85
  Frank de Vino, 121
  Anna-Maria Egger, 15
  Judy Fendelman, 59,118
  David Garcia, 116
  Judy Garlan, 167
  Raymond L. Gibson, 143
  Milton Glaser, 110
  Lester Goodman, 54,116
  Omar Grassetti, 203
  Everett Halvorsen, 141
  John Van Hammersveld, 63
  Paul Hardy, 61,120,205
  Rudolph Hoglund, 60
  Norman S. Hotz, 112,121
  Peter Hudson, 58,120
  Harry Jensen, 24
  Isac Jo, 57
  Kelley-Weigand, 118
  Kioyaki Komoda, 137
  Nancy M. Krieger, 114
  Jurgen Kryszons, 62
  William Left, 25
  Pascale Lentillon, 59
  Pete Libby, 118
  Daniel J. McClain, 59,114
  Bruce McGillivray, 115
  Ellen Mangin, 27
  Robert T. Martinott, 85
  Jean Pierre Montagne, 60
  Frank Moore, 113
  Dean Morris, 60,114
  Virginia Murphy-Hamill, 84,142
  John Newcomb, 20
  Regis Pagniez, 56
  Tony Iannotta Petrella, 54,117,142
  Steve Phillips, 57,118
  Robert Priest, 110
  Thomas Ridinger, 59,202
  Frank Rothmann, 166
  Bruce Rubin, 140
  Larry Sampson, 115
  Alex Sanchez, 142,166
  Paul Schaffrath, 56,116
  Helmut Schmidt-Rhen, 112
  Arnaldo Sedrani, 12
  Gail Segerstrom, 57
  Neil R. Shakery, 114
  Ira Silberlicht, 58
  April Silver, 54,110,167
  Sisi Sims, 140
  Jerold Smokler, 117,166
  William Snyder, 60
  Edward Spong, 56,112
  Harry Stavrakas, 193
  Dave Stech, 111
  Byron Steele, 117
  Andrew Steigmeier, 55,113
  Nancy Steiny, 202
  Dugald Stermer, 57,204
  Alex Stillano, 15,197
  Peter Tait, 140
  Melissa Tardiff, 167
  Adrian Taylor, 119,142
  Ira Teichberg, 112
  M. A. Tretel Reis, 103
  Peter A. Tucker, 113
  John R. Vogler, 85,143
  Susanne Walsh, 54,115
  Richard Weigand, 110
  Helen Weyl, 16
  Gordy Wilkinson, 61
  Leonard Wolfe, 57,115
  Christine Hafner Wong, 166
  Alfred Zelcer, 167

Editorials, design requirements, 125
placement of, 126, 132, 133
typographic character of, 127
used as lead feature, 146
Flash Forms (late-closing forms), 69
Folio and footline, centered, 45, 49, 81, 99, 100
Logos, design of, 6, 7
placement of, 7
Magazines, as a product, 6, 81, 137, 164, 165
Masthead, 35
Mugshots, 106, 107, 125, 134, 135
New Products, design requirements, 176
as "catalog," 180, 194, 196, 198, 200
as "news," 179, 188
as "show window," 179, 190–195
as "story," 178, 186
Numbering, 108, 153
Openers, design requirements, 118
spread, 149, 151
as repetition, 172–173
as theme with variations, 168–171
Pattern, precise, 91, 151, 156, 200
Publications
Adventure Travel, 57
Adweek, 84
Architectural Record, 14/15,50/51,75,130/131, 148-157,168-171,196/197
Architecture Minnesota, 140
Atlantic Monthly, 167
Attenzione, 61,120,205
Audio, 113
Audubon, 59,114
Avenue, 58
Better Health, 143
Bobbin, 140
Business Week, 85,143
Camera Arts, 59,202
Capital, 62,112
Casa Claudia, 203
Channels, 60,114
Chemical Engineering, 8,44/45,80/81,133,188/189
Chemical Week, 85
Cincinnati, 55
Construction Methods & Equipment, 52/53,77,184
Crops Quarterly, 61
Data Communications, 25
Datamation, 84,202
Dental Economics, 74,128,182
Diagnostic Medicine, 166
El Diario, El Pais Semanal, 116
Discover, 57,115
Eastern Review, 63
The Economist, 85
Electrical Construction & Maintenance, 73
Engenheiro Moderno, 40,103,138
Engineering News-Record, 24,76,132,135
Esquire, 54,110,167
Expansao, 48/49,139
Exxon Marine, 60
Flowers &, 204
Folio, 57,118
Forbes, 141
Forest Industries, 113
Fortune, 62,113,143
Geo, 54,115
Golf Digest, 20,118
Harper's Bazaar, 166
High Technology, 84,142
Hoof Beats, 5,28/29,160/161,164/165
Horchow Collection, 205
House & Home, 107-109,136,172-175,186/187,194/195
Housing, 30,84,201
Human Nature, 58
Inc, 56,116
Industrial Engineering, 5,18/19,38/39,104/105
Industrial Equipment News, 16/17
Industrial Literature Review, 200
Industrial Marketing, 82/83
Industrial World, 72,162/163,190-193
Inquiry, 115
International Management, 140
Kansas Farmer, 31
Keynote, 56,112
Le Nouveau Photocinema, 55
L'Expansion, 60
L'Express, 59
Library Journal, 26/27,42/43,94-97,129,185,198/199
Life, 58
Look, 56
Los Angeles, 55
Luxe, 142,166
McGraw-Hill Homebook, 141
Mechanix Illustrated, 55,113
Medico Moderno, 13,41,46/47
Michigan Farmer, 21,143
Midwest Purchasing, 134
Ministry, 117
Modern Plastics, 68/69
Moving House & Home, 202
National Journal, 114
Nation's Schools, 106
New Times, 118
New York, 56,117
Next, 54,116
North Shore, 57,115
O Medico Moderno, 12,102,183
Oil & Gas Journal, 22/23,63
Omni, 121
Ovation, 112
Panorama, 112,121
Pickup, Van & 4WD, 204
Prime Time, 59,118
Science Digest, 166
Scientific Research, 137
Signature, 111
Spotlight, 100/101
Technology Illustrated, 58,120
Tennis, 119
Time, 60
Town & Country, 167
Travel & Leisure, 119,142
TWA Ambassador, 167
United Mainliner, 117
Veja, 85
Working Woman, 54,117,142
World Coal, 114
Reader Service Card, 178, 188, 200
Readership, long items, 76, 77
short items, 102, 103
two-level, 41
Rules (lines), XI, 43, 72, 81, 100, 102–105, 182, 198–199
Skim reading, 20, 41
Space, "wasted," 89, 103, 184
Spine, 11, 18, 26
Staff listing, 35, 43, 135, 136, 137
Standardized format, danger in, 127, 135, 136
Stock, colored, 69, 80, 81, 128, 154, 155
Story starts, 151
Symbolism, 4
Templates (patterns), 190–192, 194, 196–197, 200
Type and pictures together, 158–159, 160, 161
Typography, color of, 91, 95–97, 103, 198, 199, 200
emphasis in, 20, 21, 25, 130, 131, 188, 189

DESIGNING FOR MAGAZINES, 2nd Edition by Jan V. White

"... invaluable resource for editors and designers facing problems common to most magazines." *Folio*

"... the well-designed format and clear text make this a valuable reference book for professionals and students." *Art Direction*

"... highly recommended." *Reference Book Review*

"... fascinating and essential reading for all involved in the editing and design of magazines, journals, and even newsletters." *WACC Journal*

Designing for Magazines proves the effectiveness of the editing-by-design concept illustrated in the author's first book, *Editing by Design*, by providing a compendium of examples that show the result of such editing/design cooperation. In a clear, concise format accompanied by numerous, large-scale illustrations, this volume addresses itself to some of the most basic problems common to most magazines, including: development of formats for the pages that recur from issue to issue, such as the front cover and contents page; how to handle columns by outside writers; the design of departments so the cumulative impression they give yields a rich impact on the reader; editorial pages, late-closing forms, new-product listings, section openers, and more, are all dealt with thoroughly. Jan White discusses each problem, shows actual solutions for real publications (many in before-and-after illustrations), following with numerous examples selected from current magazines to demonstrate the state of the art. *Designing for Magazines* — itself an example of editing-by-design techniques in action — is a handy "idea file" *of design solutions that work.*

About the Author: an award-winning designer specializing in magazines, Jan V. White has been responsible for designing and redesigning the formats of well over 120 magazines, tabloids, newsletters and books. Widely known as a lecturer and teacher of Editorial Presentation, he is also the author of *Editing by Design*.

ISBN 0-8352-1507-5